2002

Issue 74

Head Start bulletin

ENHANCING HEAD START COMMUNICATION
www.acf.dhhs.gov/programs/hsb

Issue Pull-out in English & Spanish:

Strategies to Promote Language and Social Development

Estrategias que Fomentan el Desarrollo Lingüístico y Social

Why Research?

Building Local Laboratories

The Head Start Impact Study

A Welcome to Commissioner Joan E. Ohl

U.S. Department of Health and Human Services ■ Administration for Children and Families ■ Administration on Children, Youth and Families

The *Head Start Bulletin* is published six times a year by the Head Start Bureau, Administration on Children, Youth and Families, Department of Health and Human Services.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Tommy Thompson, Secretary

ADMINISTRATION FOR CHILDREN AND FAMILIES
Wade F. Horn, Assistant Secretary

OFFICE OF PUBLIC AFFAIRS
John C. Allen, Director

ADMINISTRATION ON CHILDREN, YOUTH AND FAMILIES
Joan E. Ohl, Commissioner

HEAD START BUREAU
Windy M. Hill, Associate Commissioner

The BULLETIN is a service of the Head Start Bureau's Training and Technical Assistance Branch. Its purpose is to enhance communication among the Head Start Bureau, Head Start programs, and interested national, regional, and state organizations and agencies.

HEAD START BUREAU
JoAn Knight Herren, Chief, T/TA Branch
Brenda Jones Harden, Guest Editor
Jeff Fredericks, Managing Editor
Carmen Bovell-Chester, Division of Program Management

Head Start Bulletin

The *Head Start Bulletin* is prepared under Contract No. 105-96-2010 with PaL-Tech, Inc.

Judy David, Editor
Shannon Lewis, Assistant Editor
Aisha Mahy, Publications Assistant
Marith Schuhart, Publications Assistant

Cassandra Johnson, Graphic Designer

Head Start Bulletin
Research
Issue 74

Head Start *bulletin*

2002 Issue 74

page 10: Language and literacy

page 15: Play and its significance

page 40: Research on school readiness

page 2
Why research is important

FEATURES

RESOURCES

ARTICLES

Cover photo by D. Mentzer. Higher Horizons EHS-HS.

Page 2 photo by J. Greenberg. Okeechobee I MHS.

online... For more information on Head Start, visit our site at <www2.acf.dhhs.gov/programs/hsb/>.

Why should we take precious program dollars away from participant services and put them into research? by Brenda Jones Harden

Why Research?

TOWARD EVIDENCE-BASED EARLY INTERVENTION

ALTHOUGH THE WORD "RESEARCH" CONJURES up images of incomprehensible statistics and obscure prose for many practitioners, the Head Start community has historically embraced research as an important pathway to knowledge. Research on Head Start participants has added substantially to our understanding of the development of children from disadvantaged backgrounds and their families. Additionally, evaluations of Head Start and similar comprehensive preschool programs have resulted in a wealth of data pointing to the benefits of these programs for disadvantaged young children (e.g., Currie & Thomas 2000; Oden, Schweinhart, & Weikart 2000; Schaefer & Cohen 2000).

Scholars across a broad range of specialty areas have argued for the use of research to inform policy and practice (Smith 1990; Melton 1995; Denner et al. 1999). Policies

Photo by D.Mentzer. Higher Horizons EHS-HS.

regarding young children and their families have benefited immensely from developmental and evaluation research (Woodhead 1988; Zigler & Styfco 1998). For example, evidence derived from research on Head Start suggests that for programs to be effective, they should be long-term and of high quality (Zigler & Styfco 1993). More specific findings (e.g., regarding literacy, language, and social competence) have been documented in recent studies, including the Family and Child Experiences Survey (FACES) and the Early Head Start Research and Evaluation projects (see www.acf.dhhs.gov/programs/core).

Despite the availability of these many strands of evidence, scholars and policy makers have issued a call for more research on a variety of human service programs to ensure that public dollars are being spent in the most beneficial manner. This call for increased program accountability and evidence-based practice has not gone unheeded by Head Start professionals. In the last decade, a variety of initiatives have been mounted to enhance the research capacity of Head Start and to maximize the policy-relevant evidence emanating from programs.

One initiative was the Roundtable on Head Start Research (National Research Council 1996). The Roundtable Report proposed that a three-pronged research agenda be undertaken:

1) an examination of who is being served by Head Start;
2) the identification of ways Head Start can implement high-quality programs; and
3) an evaluation of the effectiveness of Head Start.

In addition, the Roundtable Report recommended a closer investigation of three specific content areas: ethnic and linguistic diversity of Head Start families; the community context affecting Head Start families such as violent environments; and the impact of the changing economic landscape and income support policies on Head Start families.

Another major effort was convening the Advisory Committee on Head Start Research and Evaluation in 1999. This group was charged with recommending the design of a national study to evaluate the impact of Head Start on families and children. After considerable deliberation, this Committee set forth a framework for the impact research (U.S. Department of Health and Human Services 1999) that included these elements:

- random assignment,
- nationally representative sampling,
- process and outcome measurement,
- appropriate incentives for participants, and
- embedding the impact analysis within the ongoing Head Start research agenda.

To a large extent, the recommendations emanating from these and other initiatives have guided Head Start's research endeavors—many are described in this HEAD START BULLETIN. This issue will inform you about a variety of national and local research efforts that are underway. These include large-scale impact studies, developmental process studies of children and families, and smaller-scale continuous improvement efforts. References and Web sites are provided.

Perhaps most important, this Bulletin features Head Start programs that have successfully engaged in research endeavors. Several articles discuss the challenges and benefits of incorporating a research agenda into program design. Issues addressed include staff perceptions of research, research-practice partnerships, and the use of research evidence for program improvement. Contact information for the highlighted programs is provided.

The overarching goal of this Bulletin is to emphasize the value of research to the Head Start community. The articles will provide answers to many of the questions practitioners have about the place of research in service work, such as:

Why would I take precious program dollars away from participant services and put them into research?

How can I wait for the results of research when the children and families need help now?

How can I take time from my staff's work with children and families to have them participate in a research project?

The greatest benefit of research for Head Start is the opportunity to use the evidence for continuous program improvement to ensure high-quality services.

Why should families, who have incredible life pressures, have to respond to the rounds of questions that researchers ask?

How does research directly benefit me, my participants, and my program?

Overwhelmingly, the authors of these articles conclude that the greatest benefit of research for Head Start is the opportunity to use the evidence for continuous program improvement. Thus, investing program dollars, staff efforts, and participant time in research becomes an avenue toward enhancing the quality of the Head Start programs for children and families. When understood, planned, and conducted in this context, research becomes much more than incomprehensible statistics, obscure prose, and burdens for staff and families. It becomes a means of ensuring that children and families receive the high-quality services they deserve. ■

Brenda Jones Harden, Guest Editor, would like to thank Louisa B. Tarullo, Senior Research Analyst, CORE, for her assistance with this Bulletin. Without her energy, commitment, expertise, and efficiency, this issue would not have been possible.

References

Currie, J., & D. Thomas. 2000. School quality and the long-term effects of Head Start. *Journal of Human Resources* 35 (4): 755-774.

Denner, J., C. Cooper, E. Lopez, & N. Dunbar. 1999. Beyond "giving science away": How university-community partnerships inform youth programs, research, and policy. *SRCD Social Policy Report* 13 (1).

Melton, G. 1995. Bringing psychology to Capitol Hill: Briefings on child and family policy. *American Psychologist* 50: 766-771.

National Research Council. 1996. *Beyond the blueprint: Directions for research on Head Start's families.* Washington, DC: National Academy Press.

Oden, S., L. Schweinhart, & D. Weikart. 2000. *Into adulthood: A study of the effects of Head Start.* Ypsilanti, MI: High/Scope Educational Research Foundation.

Schaefer, S., & J. Cohen. 2000. *Making investments in young children: What the research on early care and education tells us.* Issue Brief. Washington, DC: National Association of Child Advocates.

Smith, M. 1990. Psychology in the public interest: What have we done? What can we do? *American Psychologist* 45: 530-536.

U.S. Department of Health and Human Services. 1999. *Evaluating Head Start: A recommended framework for studying the impact of the Head Start program.* Washington, DC: U.S. Government Printing Office.

Woodhead, M. 1988. When psychology informs public policy: The case of early childhood intervention. *American Psychologist* 43: 443-454.

Zigler, E., & S. Styfco. 1993. Using research and theory to justify and inform Head Start expansion. *SRCD Social Policy Report* 7 (2).

Zigler, E., & S. Styfco. 1998. Applying the findings of developmental psychology to improve early childhood intervention. *In Global prospects for education*, eds. S. Paris & H. Wellman, 345-366. Washington, DC: American Psychological Association.

Brenda Jones Harden *was a 2000–2001 Society for Research in Child Development Fellow, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. She currently serves as Assistant Professor at the University of Maryland Institute for Child Study. T: 301-405-2580. E: bj34@umail.umd.edu.*

GLOSSARY OF RESEARCH TERMS

COMPARISON GROUP: individuals whose characteristics are similar to those of your program participants; these individuals do not receive any services, or receive a different set of services than those you are evaluating.

CONTINUOUS IMPROVEMENT: the process by which a program uses information or data to make changes in their program or specific services, with the ultimate goal of enhancing service delivery and program quality.

CONTROL GROUP: a group of individuals whose characteristics are similar to those of your program participants, but do not receive the program you are evaluating; individuals are randomly assigned to either the treatment (program) or control group.

DATA: specific information or facts that are collected.

DATA ANALYSIS: the process of systematically applying statistical and logical techniques to describe, summarize, and compare data collected.

DATA COLLECTION PLAN: a written document describing the specific procedures to be used to gather the research and evaluation information or data.

DATABASE: an accumulation of information that has been systematically organized for easy access and analysis, which is usually computerized.

DESIGN: the overall plan and specification of the approach expected in a particular research or evaluation effort.

EVALUATION: a systematic method for collecting, analyzing, and using information to answer basic questions about your program.

EXPERIMENTAL GROUP: a group of individuals receiving the intervention or services being evaluated or studied; this group is compared to a control group.

LOGIC MODEL: a diagram showing the logic or rationale underlying your program; it describes the links between program objectives, program activities, and expected program outcomes.

METHODOLOGY (METHOD): the way in which you find out information; it includes the methods, procedures and techniques used to collect and analyze information.

OUTCOME: outcomes are a result of the program, services, or products you provide; outcomes refer to changes in knowledge, attitudes, abilities, or behavior in participants.

OUTCOME EVALUATION: evaluation designed to assess the extent to which a program or intervention affects participants according to specific data elements; also known as impact or summative evaluation.

PARTICIPANT: an individual, family, agency, neighborhood, or community receiving or participating in services provided by your program; also known as client or target population group.

POSTTEST: a test of measurement taken after a service or intervention takes place; it is compared with the results of a pretest to show evidence of the effects or changes as a result of the service or intervention being evaluated.

PRETEST: a test or measurement taken before a service or intervention takes place; it is compared with the results of a posttest to show evidence of the effects or changes as a result of the service or intervention being evaluated.

PROCESS EVALUATION: an evaluation that examines the extent to which a program is operating as intended by assessing ongoing program operations and whether the targeted population is being served; this type of evaluation helps program staff identify needed interventions and/or change program components to improve service delivery; it is also called formative or implementation evaluation.

RANDOM ASSIGNMENT: the assignment of individuals in the pool of all potential participants to either the experimental (treatment) or control group in such a manner that their assignment to a group is determined entirely by chance.

RELIABILITY: extent to which a measurement (such as an instrument or a data collection procedure) produces consistent results over repeated observations or administrations of the instrument under the same conditions each time.

TREATMENT GROUP: a treatment group is composed of a group of individuals receiving the services, products, or activities (interventions) that you are evaluating; also called an experimental group.

VALIDITY: the extent to which a measurement, instrument or test accurately measures what it is supposed to measure.

(Adapted by Brenda Jones Harden from *The Program Manager's Guide to Evaluation*, ACYF, available from HSIPC.)

A WELCOME TO
JOAN ESCHENBACH OHL

JOAN ESCHENBACH OHL is the newly appointed Commissioner of the Administration on Children, Youth and Families (ACYF) in the Administration for Children and Families (ACF). She brings to her office over three decades of leadership experience in the public, private, and nonprofit sectors. Throughout her career, Commissioner Ohl has "focused extensively on improving the lives of children and youth—be it their health, their education or human services needs," as stated in her testimony before the Senate's Committee on Finance in November 2001.

Photo courtesy of ACYF.

Joan E. Ohl, Commissioner of ACYF

Prior to joining ACYF, Commissioner Ohl spent four years as West Virginia's Cabinet Secretary of the Department of Health and Human Resources (DHHR). As chief administrator, she emphasized effective and efficient programs, fiscal accountability and personnel development. She successfully implemented the state's welfare reform program and numerous child care quality improvement measures. Under her leadership, West Virginia was recognized in 1999 and 2000 as having the highest percentage of utilization of subsidized child care of any State. As Secretary of DHHR, she established the Public Health Transition Program to refocus on the provision of basic public health services in West Virginia. When she left West Virginia State government, virtually all eligible programs were receiving enhanced funding or high performance bonus funding.

In her Senate testimony, Commissioner Ohl expressed her commitment to the goals of ACF and ACYF: "I will continue to work to assure that the various levels of Federal, State and local government work together to ensure that a strong community-based infrastructure delivery system is established, maintained and accountable for its outcome. We must continue to focus on prevention and early intervention programs and services."

Commissioner Ohl has a vision for Head Start: "We need to assure the comprehensive nature of the Head Start program with special emphasis given to ensure that children receive the EPSDT screen and all subsequent follow up services both for their physical and behavioral health needs." She called for special emphasis on literacy programs to prepare children for school and for coordination of efforts with the Department of Education. She also plans to work with regional offices and grantees to address under-enrollment issues and do outreach to special populations.

Additionally, Commissioner Ohl wants to give special attention to the needs of our nation's youth. She called for "positive youth development programs" and will work extensively with Assistant Secretary Horn on a special initiative to address teenage issues.

As a long time resident of West Virginia, Commissioner Ohl is especially aware of the barriers which must be overcome for effective program and service delivery in rural states. "I will work on initiatives which help to strengthen programs and services for rural children and families, as well as strengthen rural communities."

Commissioner Ohl's achievements have not gone unnoticed. Governor Underwood honored her with the Distinguished West Virginian Award. The West Virginia Coalition Against Domestic Violence commended her leadership efforts in helping to end domestic and family violence. For her dedication to cultivating and building health care systems in the State, the West Virginia Rural Health Association presented her with its inaugural Joan E. Ohl Rural Health Leadership Award.

Commissioner Ohl was born in Harrisburg, Pennsylvania and raised in Lewes, Delaware. She received an undergraduate degree from the University of Delaware, a Master of Education degree from the State University of Buffalo, New York and continued her studies at Pennsylvania State University. Married to Dr. Ronald E. Ohl, former president of Salem International University, she resides in Martinsburg, West Virginia. ■

CHILD OUTCOMES RESEARCH AND EVALUATION

The CORE team plans and conducts a broad range of research and evaluation projects relevant to Head Start. **by Carole Kuhns and Rachel Chazan-Cohen**

THE CHILD OUTCOMES RESEARCH AND EVALUATION (CORE) team in the Administration for Children and Families (ACF) Office of Planning, Research and Evaluation collaborates with the Head Start Bureau, other Federal agencies, and the broader research community to conduct research and evaluation relevant to Head Start and Early Head Start programs. CORE conducts program evaluation, designs and implements research to develop new knowledge relevant to Head Start programs and policies, and works to build research capacity within the field. Highlights of current research relevant to Head Start programs and policies are described below. Detailed information on the many research projects of CORE can be found at the Web site <*http://www.acf.dhhs.gov/programs/core/*>.

National Evaluations

The Early Head Start Research and Evaluation Project is an experimental study of approximately 3,000 families living in 17 diverse communities across the U.S. The six-year study that began in 1996 includes: 1) an implementation study, 2) impact evaluation with random assignment, 3) research by local universities within the 17 communities, 4) policy studies addressing specific information needs such as child care, welfare reform, fatherhood, and 5) activities for continuous program improvement. Initial reports of the implementation and impact studies (*Leading the Way and Building Their Futures*) are available at <*http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_intro.html*>.

The final report on child outcomes through age 3 will be available in June, 2002. The ACYF is also funding a longitudinal follow-up of these children prior to their entry into kindergarten.

The Head Start Impact Study is a longitudinal study, begun in 1999, of 5,000-6,000 three- and four-year-old children from a stratified, national sample of grantees/delegate agencies. Children in the study will be randomly assigned to either a treatment group (which receives Head Start services) or a comparison group (which does not receive Head Start services). Data collection will begin in fall 2002 and continue through spring 2006 in order to follow children through the end of first grade. The multifaceted data collection includes interviews with parents, direct child assessments, surveys with Head Start teachers and child care providers, direct observations of the quality of different care settings, observations of teacher-child interactions, and teacher ratings of children.

Photo by D. Mentzer. Higher Horizons EHS-HS.

Connecting research and practice

The Head Start Family and Child Experiences Survey (FACES) is an ongoing, longitudinal study of nationally representative samples of children and families in Head Start programs. Children are followed from entry into Head Start, through one or two years of program participation, with follow-up in the early school grades. Findings from FACES are providing new insights into the characteristics, experiences, and outcomes for Head Start children and families to support program initiatives in staff development and family literacy. The first cohort of FACES began in 1997, with a sample of 3,200 children and families in 40 programs; a new round of FACES was launched in fall 2000 with 2,800 children in 43 different programs. For more information, see <*http://www.acf.dhhs.gov/programs/core/ongoing_research/faces/faces_intro.html*>.

Evaluation of the Head Start/Public Schools Early Childhood Transition Demonstration Program was designed to assist low-income students in kindergarten through third grade and their families to obtain support services and to promote the

active involvement of parents in the education of their children. The 31 demonstration grantees participated in a national evaluation using an experimental design to study the effect of the demonstration on children, families, the Head Start programs, the public school systems, and the communities. For more information, see <*http://www.acf.dhhs.gov/programs/core/pubs_reports/hs/transition_intro.html*>.

Consortia and Research Partnerships

Head Start Quality Research Center (QRC) Consortium: The first QRC consortium (1995–2000) created ongoing partnerships among ACYF, Head Start Grantees, and universities to enhance program practices and outcomes. A new consortium was formed in March 2001 with the award of eight new cooperative agreements. The new QRCs are developing and testing specific program practices designed to promote school readiness of Head Start children in the areas of literacy, social-emotional development, parent involvement, curriculum, and assessment. Cross-site external data collection will provide information based on the FACES measurement battery on classroom quality, child outcomes, family demographics, and staff qualifications. For more information, see <*http://www.acf.dhhs.gov/programs/core/ongoing_research/qrc/qrc.html*>.

The Head Start-University Partnerships & Graduate Student Head Start Research Grants support partnerships between universities and Head Start/Early Head Start programs to develop research that contributes new knowledge in children's development or improvement of Head Start programs. A new round of Head Start–University partnerships will be funded in 2002, focusing on building models for the use of child outcomes in improving local program quality and on promoting mental health for infants and toddlers in Early Head Start. A new round of Graduate Student grants will also be funded to help build research capacity among young investigators, as well as to foster mentoring relationships with more senior researchers. For more information, see <*http://www.acf.dhhs.gov/programs/core/ongoing_research/index.html*>.

The Head Start/Early Childhood Mental Health Initiative with NIMH awarded five research grants in 1997 as the core of a new early childhood mental health initiative addressing prevention and treatment of children's mental health concerns. Research findings will assist Head Start programs in providing prevention and intervention services that are comprehensive as well as developmentally and culturally appropriate. For more information, see <*http://www.acf.dhhs.gov/programs/core/ongoing_research/acyfnimh/acyfnimh.html*>.

NICHD Study of Early Child Care and Head Start Children is a collaborative effort of ACYF and the National Institute of Child Health and Human Development (NICHD) to study low-income families as a sub-study of the larger prospective, longitudinal, naturalistic study of 1,200 children from 10 sites across the U.S. ACYF will explore the concurrent, long-term, and cumulative influences of early child care experiences on the development of young children living in poverty.

The Department of Education Early Childhood Longitudinal Studies: Kindergarten Cohort (ECLS-K) is a longitudinal study of 23,000 children from 1,000 schools nationwide who began kindergarten in Fall 1998. ACYF has verified Head Start attendance for approximately 3,000 low-income children in the larger sample and is linking these data with the Head Start Family and Child Experiences Survey (see FACES above). For more information, see <*http://www.nces.ed.gov/ecls*>. **Birth Cohort (ECLS-B)** is a longitudinal study following a nationally representative sample of 12,000 children born in 2001 from birth through first grade. ACYF will supplement previously planned analyses for the birth cohort in child development and family functions. Enhancements include observations of child care quality and parent-child interaction. For more information, see <*http://www.nces.ed.gov/*>.

NICHD, ASPE, ACYF, and the Ford Foundation Study of Low-Income Fathers of Infants and Toddlers: Ten of the 17 Early Head Start Research and Evaluation sites are participating in a longitudinal study of fathers of 24- and 36-month-old children to provide an in-depth look at the role of fathers in the lives of their children. Findings will offer an understanding of the strategies that Early Head Start programs use to engage fathers. Recently, funds have been made available to contact

Continued on page 54

LANGUAGE AND LITERACY FOR *ALL* CHILDREN

What can researchers recommend to teachers who are working in the early childhood classroom with children from diverse linguistic backgrounds? **by Patton O. Tabors**

EVIDENCE FROM RECENT RESEARCH has turned the spotlight on early childhood as a critical time for developing skills related to reading and writing in English-speaking children (International Reading Association & the National Association for the Education of Young Children 1998; Snow, Burns, & Griffin 1998; Dickinson & Tabors 2001). At the same time, but in what seems like a parallel universe, research has been studying the language and literacy development of young children learning English as a second language (Tabors 1997; Tabors & Snow 2001). But young children from English-speaking and English-learning1 backgrounds do not exist in parallel universes. In fact, they often exist in the same universe, and that universe is often an early childhood classroom. So what can researchers recommend to teachers who are working in the universe of the early childhood classroom with children from diverse linguistic backgrounds? How can teachers help *all* children develop language and literacy abilities?

Teaching English Speakers

FIRST, LET'S THINK ABOUT the language and literacy skill areas that research shows are important in early childhood development. Researchers have consistently identified five areas that are related to children's later ability to learn to read and write:

- alphabetic knowledge,
- phonological awareness,
- book and print concepts,
- vocabulary knowledge, and
- discourse skills.

Let's assume—as most researchers do—that the teachers and children in the classroom are operating in the same language, and that is English. Table 1 shows what teachers can do to help English-speaking children develop skills in these areas and what children learn. Let's look at each skill area in more detail.

First, children develop alphabetic knowledge when teachers use activities that target letter recognition. These activities range from singing the alphabet song, to identifying the first letters in children's names, to having children use magnetic letters for their invented spelling. Simultaneously, teachers can help children develop phonological awareness by pointing out the sounds that make up words and how those sounds relate to letters of the alphabet. Concentrating on sounds in words that are highly familiar and important to children—like their own names or names for objects in the room—yields the best results. Using rhyming text in songs and poetry also helps children understand that when one sound in a word changes, the meaning of the word changes as well.

Book and print concepts develop when teachers talk about how books work. Book reading can include information about where the front and back of a book are, what kinds of information can be found on the cover (the title, the names of the author and the illustrator), where the print is on the page, how the print is read (top to bottom and left to right in English), what a sentence looks like, and what different punctuation means at the end of sentences. Including these types of information as part of the book reading process will help children begin to understand the ins and outs of books.

Children share what they know about books

Photo by C. Dyer. Higher Horizons EHS-HS.

Vocabulary knowledge—words, words, words, words—is key for the development of young children's literacy skills. The more words children know, the more words they will have to connect to the letters and sounds they meet in print. Teachers help children develop their vocabulary by intentionally present-

ing new words as part of every activity in the classroom; by using and explaining new words in everyday conversations; and by reading new words and helping children understand their meanings. Children should be learning 6 to 10 new words a day in the early childhood period. In their classrooms, they need to hear and use lots and lots of new words.

Finally, language usage in the classroom should also help children develop more advanced discourse skills. What does this mean? Discourse skills refer to using language in structured ways to go beyond the basics of conversation—for example, to tell a story about a past event, or to explain how something works, or to build a fantasy world with words. Teachers encourage the development of these types of linguistic structures when they ask open-ended questions like "What did you do over the weekend?" or "Why do you think the stone sinks in the water?" or "What did your baby do when you put her in the carriage?" But asking the question should not be the end of the interaction, just the beginning. Teachers need to support children's efforts to answer these sorts of questions, extending the conversation over a number of turns.

TABLE 1

WHAT TEACHERS DO	WHAT CHILDREN LEARN
Alphabet Knowledge	
Activities that target letter recognition	To identify the letters of the alphabet
Phonological Awareness	
Activities that emphasize the sounds that make up words	To identify the sounds that make up words
Book and Print Concepts	
Activities that show how books look and how they work	What the contents of a book are, including where the print is and where the book starts and ends
Vocabulary Knowledge	
Activities that emphasize words and their meanings	That there are lots and lots of words that are used for talking, writing, and reading
Discourse Skills	
Activities that encourage telling stories, explaining how the world works	To use these more sophisticated oral language forms building a fantasy world

A curriculum that is built around opportunities for children to develop their skills in these five areas will be a curriculum that supports children's language and literacy development. However, this approach assumes that the teachers and the children in the classroom share English as their common language and that these activities are being carried out in English. What does this mean for children learning English?

Teaching English Learners

IN FACT, MANY OF THESE VERY SAME OPPORTUNITIES are relevant for English-learning children. Let's look at the five areas again while thinking about how teachers can help English learners develop their language and literacy skills.

Learning about the English alphabet is clearly useful for English-learning children. It is something that they can begin quite early in their exposure to English. Furthermore, any activities that help English-speaking children develop phonological awareness will also be helpful for English-learning children. In my research, I found that English-learning children in a preschool classroom watched English speakers to see how the sounds of English were formed (Tabors 1997). At first, they were most comfortable using English when they could sing or respond to predictable or rhyming books. Consequently, teachers who emphasize "tuning in" to the sounds of English will be helping both English speakers and English learners.

What about book and print concepts? Here teachers need to think carefully about what English-learning children can understand in the book reading situation and plan accordingly. One effective technique is small group book readings where information and conversational exchanges can be tailored to individuals. As English-learning children gain more understanding of English, they can be involved in more extensive discussions of book and print concepts and participate in larger groups.

Developing a vocabulary in English is, of course, one of the

first tasks of English-learning children. In my research, English learners would often pick up objects from around the classroom, bring them over to the teacher, and ask for the English words. By being aware of the vocabulary needs of the children and by explaining, defining, and showing what a word means, teachers provide a supportive language environment for all children.

Finally, we turn to discourse skills. Given that English-speaking children are still developing these higher level skills during early childhood, it is not surprising that they will be the most difficult for English learners. In my research, the English-speaking children used their discourse skills to the greatest extent in the socio-dramatic play area. But it was not until the spring of the year that any of the English learners participated in play in this area. Apparently, they believed that they did not know enough English to be effective participants in socio-dramatic play earlier in the school year. However, teachers who are aware of English learners' proficiencies and their need to develop discourse abilities can make sure they have extended conversations with them, as well as with English speakers, that help build more sophisticated structures in English.

Photo by C. Dyer. Higher Horizons EHS-HS.

In sum, many of the same activities can be used in early childhood classrooms to help both English-speaking and English-learning children prepare for later literacy development in English. Of course, teachers need to be sensitive to the proficiency level of the English learners so they can calibrate the activities that include all the children or develop small groups reflecting different proficiency levels.

Teaching ALL Children

BUT ARE THESE LANGUAGE AND LITERACY activities geared toward English the only meaningful ones in a classroom with children from diverse language backgrounds? What about the home languages and literacies of the English-learning children? Couldn't they be incorporated into the classroom as well, in ways that would be socially useful and cognitively challenging for all the children?

The answer is: Absolutely. And not only could activities related to the home languages and literacies of the English-learning children be included, but they should be included. Why? For two very different, but complementary reasons:

This addition to the curriculum will be socially useful. For the English learners, the inclusion of their home languages and literacies in the classroom curriculum allows them to be the "experts" and builds pride in the languages and cultures of their families. For the English speakers, the inclusion of other languages and literacies in the classroom curriculum provides them with insight into the capabilities of their classmates and their classmates' families. It also clues them into why these children may not use a lot of English in the classroom right away.

This addition to the curriculum is also cognitively challenging: All children will benefit from comparing languages and literacies in ways that will develop metalinguistic awareness, the ability to think about how language works.

So what would teachers need to do to include the languages and literacies of English-learning children in an early childhood classroom? Let's look at Table 2, which is an expanded version of Table 1 but now includes activities and learning that encompass the languages and literacies of English-learning children.

Although many languages use an alphabet that is the same or similar to the one used in English (such as Spanish and French), many other languages are alphabetic but with different writing systems (Arabic) or are not alphabetic at all (Japanese). Teachers can find out about the different writing systems represented among the children's languages by asking parents or other community members. They can share that information with the children in interesting and appropriate ways. Labeling objects in the classroom or writing each child's name (using a different color for each language) helps children see what different written languages look like. Such activities deepen their understanding that different languages look and sound different, but they are all used to talk about the world.

Of course, as soon as different languages are brought into the classroom, children notice that the languages have different

sounds. Often children can mimic the sounds of a language before they begin to acquire any facility in the language. I call this "learning the tune" before "learning the words" of the language. In order for children to understand that these sounds represent meaningful messages to the people who use them, speakers of different languages (parents or others) should come to the classroom to read stories, sing songs, or present an activity in their home language. If the visitor and some of the students speak the same language, this will give those children a chance to be the "experts" and help their classmates grasp what is happening.

Introducing books written in different languages raises all children's awareness of the different forms that books take. Sharing books that are written in different scripts (such as Bengali or Chinese) or that are read from the back to the front (such as Hebrew), and having speakers of these languages demonstrate how to read them, emphasizes the variety of languages and literacies in the world. If printed books are not available or if there is enthusiasm for a parent-involvement activity, books can be written and illustrated by parents in their home languages. These materials can be put into the classroom library.

Regarding vocabulary development, children are more aware of the importance of words if they learn new names for the objects and concepts that they already know in one language. For the English-speaking children, this process teaches them that all languages use words as the building blocks for communication. For the English-learning children, they become the "experts" in providing names in their

TABLE 2

WHAT TEACHERS DO	WHAT CHILDREN LEARN
Alphabet Knowledge	
Activities that target letter recognition in in English	To identify the letters of the English alphabet
Activities that target comparing alphabets or writing systems in other languages	*That other languages have different alphabets or writing systems*
Phonological Awareness	
Activities that emphasize the sounds that make up English words	To identify the sounds that make up English words
Activities that present the sounds of other languages	*That other languages have different sounds, but all languages use sounds to make words*
Book and Print Concepts	
Activities that show how books written in English look and how they work	What the contents of a book written in English are, including where the print is and where the book starts and ends
Activities that show how books written in other languages look and how they work	*That books may look quite different and even be read in a different way if they are written in other languages*
Vocabulary Knowledge	
Activities that emphasize English words and their meanings	That there are lots and lots of words in English that are used for talking, writing, and reading
Activities that emphasize that there are words in other languages that mean the same thing as words in English	*That other languages use different words for the same object or concept*
Discourse Skills	
Activities that encourage telling stories, explaining how the world works, building a fantasy world using English	To use these more sophisticated oral language forms in English
Activities that demonstrate that other languages have similar forms although they may seem a bit different	*That these or similar forms exist in other languages as well*

Activities related to the home languages and literacies of English-learning children can and should be incorporated into the early childhood classroom.

home language while they are acquiring new names in English. Every time a new English word is introduced, an effort should be made to identify that word in at least one other language. And every time an English-learning child wants to know an English word for an object or concept, the trade-off would be to find out that word in his or her home language. In this way, everyone in the classroom (including adults) becomes a language learner.

Story-telling in different languages helps children learn about discourse. This discourse form is nearly universal, although its structure may vary from culture to culture. In order for story-telling to be engaging in a language that some children do not understand, it is useful to include pictures or visuals, or to tell a known plot. Again, the children who already speak the language of the story are the "experts" and can act as the interpreters (but not the translators) of the story for their classmates. If they take active roles in the story-telling, they will feel even more affirmed and involved.

Perhaps, this seems like a lot to ask. But it is possible to start slowly and, over time, develop classroom activities with more and more of these features. Clearly, it is critical to have the help of parents or others who speak a variety of languages. These contacts take time to develop. But once made, they provide invaluable opportunities for meaningful contributions by parents and the wider language community. By developing multi-language activities, the teacher can support the languages and literacies of all children in the early childhood classroom.

A final thought: There are, of course, early childhood classrooms with only English speakers. Does that mean that the second half of this discussion is irrelevant to those classrooms? On the contrary. It is still possible, and valuable, to incorporate a variety of languages and literacies into these classrooms. The children will benefit from the opportunities to develop greater metalinguistic awareness, a skill that will serve them well in learning to read and write in English.

[1] *The term "English-learning" is used in this paper to refer to the process of learning English by children who are not native speakers of English.* ■

REFERENCES

Dickinson, D.K., & P.O. Tabors, eds. 2001. *Beginning literacy with language: Young children learning at home and school.* Baltimore: Paul H. Brookes Publishing, Inc.

International Reading Association and the National Association for the Education of Young Children. 1998. Learning to read and write: Developmentally appropriate practices for young children. A joint position statement of the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC). *Young Children*, 53 (4), 30-46.

Snow, C., M. Burns, & P. Griffin, eds. 1998. *Preventing reading difficulties in young children.* Washington, DC: National Academy Press.

Tabors, P.O. 1997. *One child, two languages: A guide for preschool educators of children learning English as a second language.* Baltimore: Paul H. Brookes Publishing, Inc.

Tabors, P.O., & C.E. Snow. 2001. Young bilingual children and early literacy development. In *Handbook of early literacy research*, eds. S.B. Neuman & D.K. Dickinson. New York: Guilford Publications.

Patton O. Tabors *is a Research Associate in the Harvard Graduate School of Education. T: 617-495-3096; E: Patton_tabors@harvard.edu.*

THE SIGNIFICANCE OF PLAY

It is essential that early childhood educators learn about new ways to facilitate successful play experiences in their classrooms and partner with Head Start families to promote children's social competency. **by Christy McWayne, John Fantuzzo, and Virginia Hampton**

THE NATIONAL EDUCATION GOALS STATE that all children should have access to developmentally appropriate preschool programs that help prepare them for school (Kagan, Moore, & Bredekamp 1995). Effective preschool programming is designed to protect children against environmental risks and to support children's mastery of developmentally relevant competencies (U.S Department of Health and Human Services [DHHS] 1996). Preschoolers' development in the areas of communicative, cognitive, physical and motoric, and social-emotional functioning has been linked to later school success (Ladd & Price 1987; Prince 1992).

By focusing intervention across these key areas of children's early development, Head Start is pivotal in helping young children prepare for school. The dual importance of promoting children's competency through classroom curriculum design and working in partnership with families to ensure children's success is emphasized in the revised Head Start Program Performance Standards (DHHS 1997). From its formation, Head Start has targeted children's social competence as a primary goal of intervention (Raver & Zigler 1997).

This article will address a specific aspect of social competence—peer play. First, we provide an overview of the theoretical and research literature related to the significance of peer play in promoting successful development. Second, we discuss how quality assessment, intervention, and parent involvement can be used to promote prosocial play behaviors in Head Start children.

The importance of social competence

SOCIAL COMPETENCE IS DEFINED as *the capacities children possess for developing positive relationships with adults and other children* (Hart et al. 1997). It is well accepted that children's development in all areas of functioning is influenced by their ability to establish and maintain positive, consistent, and primary relationships with adults and peers (Sroufe et al. 1992). Evidence of the significance of social competence for preschool children has been demonstrated by its ability to predict later competence in other domains and school adjustment (DeRosier, Kupersmidt, & Patterson 1994; Ladd, Birch, & Buhs 1999).

Early childhood educators and researchers realize that social competence is a complex, multifaceted area of development (Raver & Zigler 1997). It includes regulating one's emotions, communicating effectively, taking the perspective of others, problem-solving and conflict resolution, and, of course, developing positive peer relationships. For preschoolers, the ability to establish and maintain effective peer relationships

Photo by C. Dyer. Higher Horizons EHS-HS.

Adults can help guide peer interactions

requires the coordination of multiple skills across developmental domains. This emerging competence is a primary indicator of school readiness.

The degree to which children master the developmental task of getting along with peers helps to determine successful negotiation of challenges in later developmental stages. Longitudinal research has indeed linked poor peer relations in the early childhood years with detrimental consequences during later developmental periods (Denham & Holt 1993; DeRosier, Kupersmidt, & Patterson 1994). Preschoolers with difficult peer relationships are at greater risk for numerous academic and behavioral problems, such as poor academic achievement, reten-

tion, truancy, and emotional maladjustment (Parker & Asher 1987; Hartup & Moore 1990; Kupersmidt, Coie, & Dodge 1990; Ladd & Coleman 1997). Conversely, preschoolers with positive peer relations have a greater likelihood of experiencing positive adjustment in kindergarten as well as positive academic outcomes in elementary school and high school (Ladd & Price 1987; Ladd, Kochenderfer, & Coleman 1996; Hampton 1999).

Play as a dynamic developmental context

PLAY IS A PRIMARY CONTEXT FOR PRESCHOOLERS to acquire and express peer social competencies (Gallagher 1993). According to the National Association for the Education of Young Children (NAEYC), "Play is an important vehicle for children's social, emotional, and cognitive development, *as well as* [emphasis added] a reflection of their development" (Bredekamp & Copple 1997). In other words, children not only develop skills necessary for school success during peer play, but play is a mirror for children's current developmental capacities.

The child development theories of Piaget and Vygotsky provide a conceptual framework for understanding the contribution of play to development. According to Piaget (1962), children gain knowledge about the world through play and incorporate that information into existing cognitive structures (Creasey, Jarvis, & Berk 1998). Piaget proposed that children progress from "practice play" (which consists of individual sensorimotor activities) to "symbolic play" (in which children acquire the use of symbols and experience make-believe) and finally, to "play with rules" (during which they learn to regulate social interactions) (Nicolopoulou 1993). As children engage in these increasingly complex activities, they adjust their existing ways of viewing the world. Piaget also believed that peer interactions during play provide children with opportunities to develop higher-level cognitive skills. They develop perspective-taking abilities when they argue or express different viewpoints. For Piaget, cognitive development occurs not through the medium of play itself but through the enhancement of specific skills during peer interactions in play (Creasey, Jarvis, & Berk 1998). The Piagetian perspective has been influential for several decades.

Photo by J. Greenberg. Okeechobee II MHS.

However, Piaget's theory has been criticized for not giving adequate attention to social and cultural issues in development (Corsaro & Schwarz 1991). Vygotsky's theory of development (1978) has received increasing support because of its emphasis on the social and cultural aspects of play. Vygotsky proposed that children's competencies are affected by the cultural practices and beliefs conveyed through social interactions and communication (Rogoff 1993). Through interactions with more knowledgeable adults and peers, children learn about cultural norms. When engaging in pretend play, children must work together to develop rules to govern the activity in these imaginary situations (Goncu 1993). In Vygotsky's theory, pretend play provides children with the opportunities to learn implicit rules of social behavior, according to their cultural group's norms. He also spoke about the "zone of proximal development," which referred to both children's individual abilities to accomplish and create as well as their capabilities to grow and extend when confronted with the ideas of older and wiser peers. Therefore, he considered play the "source of development" during early childhood (rather than just a conduit of development), because it enables children to internalize social rules, acquire cognitive processes, and advance their competencies.

Children learn to cooperate during play

Developmental contributions of peer processes

ADDING TO THESE EARLIER THEORIES, developmental and educational psychologists have now proposed specific ways socialization experiences with peers influence student's academic engagement (Birch & Ladd 1996; Wentzel 1999). With the recent emphasis on school readiness for Head Start children, these models are particularly relevant. One of these models posits that peer relationships affect school accomplishment through motivational processes (Wentzel 1999), indicating that peer relationships may establish and define the significance of learning and academic achievement and provide the motivation for children to succeed in school. Specifically, positive interactions with peers help children develop the motivation to engage in prosocial behaviors, such as being cooperative and willing to ask for help, that lead to academic success (Wentzel 1999). For example, as young children develop their attitudes toward school, the quality of their relationships with peers can affect whether they like or dislike school. Acceptance from peers helps children want to be involved in classroom activities, whereas peer conflict and rejection can suppress children's motivation (Birch & Ladd 1996). Children who experience rejection by peers have lower levels of interest in school and are more likely to drop out of school, which suggests that negative peer relationships contribute to decreased motivation to succeed in school (Wentzel & Asher 1995; Hymal et al. 1996). Because these influences are proposed to occur as early as the preschool years (children's first experience with school and a structured learning environment), children's primary peer context—free play—becomes ever more important as an opportunity for learning and development.

In addition, important associations exist between interactive peer-play behavior and the emergence of other competencies indicative of school readiness, such as early literacy skills, approaches to learning, and self regulation (Fisher 1992; Shonkoff & Phillips 2000; Fantuzzo & McWayne 2002). School readiness skills such as literacy are reflected and enhanced in play activities such as story-telling (Pellegrini & Galda 1993). The complex skills necessary to establish and sustain effective play interactions with peers also require children to exercise self-control. For example, preschoolers who have difficulty controlling their emotions during play (e.g., crying, having a tantrum, or becoming angry) have a more difficult time making and keeping friends. Other behaviors significant to the learning process, such as cooperation, attention, and persistence, are also learned during play interactions among peers (Bredekamp & Copple 1997; Creasey, Jarvis, & Berk 1998).

Not only does effective peer interaction enhance development across domains of functioning, but the emergence of cognitive, linguistic, and socioemotional competencies contributes to successful peer interactions. With increasingly advanced cognitive skills, children develop perspective-taking abilities helpful for engaging in collaborative activity, solving interpersonal problems, and developing empathy (Frost 1992; Goncu 1993). Advances in linguistic skills enable children to improve their communication with peers and make their own point of view known. To establish effective play with peers, children need a repertoire of social skills—they must recruit playmates, enter the peer group, gauge other children's responses, and negotiate play activities (Creasey, Jarvis, & Berk 1998). Positive peer relationships are also enhanced by children's ability to regulate their emotions so they can maintain cooperation during interpersonal conflicts.

Implications for early childhood practice

THUS, THEORY AND RESEARCH TELL us that peer play is a significant context for children's early development. However, this knowledge must be translated into educational practice to be meaningful for early childhood teachers and the families of Head Start children. In this next section, we discuss three areas of the Head Start Program Performance Standards relevant to children's play interactions: 1) partnerships between Head Start staff and families; 2) classroom curriculum design; and 3) assessment and intervention.

Communication and partnership between staff and families. Early childhood educational programs for children from high-risk environments recognize the critical role of the family in laying the foundation for success in school (Garcia Coll, Meyer & Brillon 1995; Slaughter-DeFoe & Brown 1998). There have been increasing mandates to involve parents in the specific early childhood learning experiences of their children, causing a reconfiguration of parents' roles within early childhood programs (Cochran 1993; Powell 1998). Head Start has, from its inception, been a two-generational program and now requires parental involvement in all aspects of the program's implementation (i.e., program planning, curriculum development, and daily classroom activities) (DHHS 1997). Therefore, Head Start teachers are not only required to share their observations of children's development with parents but are also expected to obtain information relevant to children's classroom functioning from parents. This information exchange can occur in various ways—while parents serve as volunteers in the classroom, during parent-teacher conferences, or during home visits.

The Head Start Program Performance Standards specifically require that teachers and staff provide opportunities for parents to increase their child observation skills so that they may contribute information as equal partners in their children's educational process (DHHS 1997; Slaughter-DeFoe & Brown 1998). Volunteering in the Head Start classroom offers a perfect opportunity for parents to observe their children in free play activities. Indeed, a recent study conducted with Head Start children and families suggests that as parents increase their understanding and ability to facilitate peer play, children's academic success actually increases (Lamb Parker et al. 1999).

An essential aspect of information exchange is the development of a common language. The ability to communicate with the same words that have shared meaning helps parents and teachers understand the child's functioning and be partners in the child's learning (Fantuzzo & Hampton 2000). A common language also facilitates opportunities for teachers to learn more about children's culture. Discussions about children's play experiences at home and in the neighborhood allow teachers to learn about cultural customs and how they are manifested in children's play. This information can include the specific games and activities that children engage in, who teaches the children to play games, and the meaning of these games and activities within their cultural context (Mize & Abell 1996; Fantuzzo & Hampton 2000). Recognition of the cultural aspects of children's play has the potential to strengthen the partnership between teachers and families (because teachers are explicitly valuing important aspects of culture) and to communicate to families the importance of bringing cultural traditions into school and celebrating them. Knowledge about children's play at home can help teachers plan curricula and interventions that best meet children's needs (Fantuzzo & Hampton 2000).

Indeed, gathering and sharing information serves as the basis for developing useful interventions to develop children's social competency in both home and school settings (Fantuzzo, Mendez, & Tighe 1998; Powell 1998). Play provides a perfect context for helping adults get more involved in children's developmental progress. During play, teachers and parents can observe children's emergent competencies as well as identify areas needing extra assistance. For example, if

Photo by J. Greenberg. Okeechobee II MHS.

parents and teachers observe that a child acts differently around peers in the home and in the classroom, they can discuss these differences and how to promote competencies in both settings. Children's play, therefore, gives adults insights into children's development and opportunities to support the development of new strategies for social interaction (NAEYC 1996).

Informing the curriculum. The development of an age-appropriate curriculum involves recognizing realistic and attainable goals for children to provide optimum learning experiences (NAEYC & NAECS/SDE 1991). Because developmental domains are interrelated, educators should use these interrelationships to organize children's learning experiences in ways to promote optimal development within a domain and across them. Furthermore, recognition of the connections across developmental domains is useful for curriculum planning appropriate to the wide age range in many preschool classrooms (NAEYC 1996).

Based on findings from research, the early childhood curriculum should promote play to enhance social development and to facilitate learning in other domains (NAEYC & NAECS/SDE 1991; DHHS 1997). Decisions about the best ways to facilitate these multiple competencies should be made at the classroom level, based on children's individual needs (Bredekamp & Rosegrant 1992). Teachers can help children enhance their cross-domain competencies by providing thematic organization for play; offering appropriate props, space, and time; and extending and elaborating on children's ideas (Levy, Wolfgang, & Koorland 1992). Therefore, child-initiated, teacher-supported play is an essential component of developmentally appropriate practice.

Screening, assessment, and intervention. Members of the National Education Goals Panel emphasized that data collection plans should include input from families, teachers, and the children themselves (Kagan, Moore, & Bredekamp 1995). Head Start mandates procedures for screenings and assessments of children's social functioning to identify strengths and needs. In fact, the Head Start Performance Standards call for screenings of children's social skills within 45 days of the time when they enter the program (DHHS 1997). The Standards also indicate that the screening should occur in collaboration with families to obtain multiple perspectives on children's behavior and development. Ongoing assessments of children's progress are needed to identify any areas of need that may arise. Therefore, both parents and staff should contribute information to the assessments based on their observations of children's functioning over time. Similarly, the NAEYC and NAECS/SDE (1991) position statement indicates that assessments should include observations by parents and teachers in naturally occurring contexts. Clearly, play is a primary context where useful observations can be made.

To meet these guidelines and standards, early childhood programs need culturally sensitive and scientifically sound assessment instruments that identify children's strengths and needs in natural contexts. Some rating scales and observational methods meet these rigorous assessment criteria and are useful in identifying children experiencing difficulty during peer play. Furthermore, when parents and teachers use valid and reliable instruments, a common language is created, and the information exchange between home and school is stimulated.

Information from these instruments can also provide a way to guide interventions and to evaluate treatment outcomes. As Head Start strives to enhance children's social competencies, interventions must be developed for children with peer difficulties. The development of these interventions must be guided by scientifically valid methods of identifying those children.

The development of an assessment tool followed by an intervention to help children experiencing difficulties in peer play was undertaken jointly by Head Start staff, parents, and university researchers (Fantuzzo, Coolahan, & Weiss 1997). First, observations of children's free play were videotaped and coded by both research assistants and Head Start parents to ensure cultural sensitivity. Next, salient peer play behaviors from the videotapes were transformed into individual questions (or items) to form a rating instrument. This instrument was developed in collaboration with teachers and parents to describe a range of peer play interactions. Items were designed to differentiate children who demonstrated positive peer relationships

from those who were less successful with peers.

Three types of play interactions were observed and formed the basis of the rating scale:

- *interactive peer play behaviors* include creative, cooperative, and helpful behaviors that facilitate successful peer play interactions (e.g., sharing toys, helping to settle peer conflicts, disagreeing without fighting);
- *disruptive peer play behaviors* include aggressive and antisocial play behaviors (e.g., grabbing toys, having a tantrum, and starting fights or arguments with other children during play);
- *disconnected peer play behaviors* include hovering outside of a play group, needing help from the teacher to join play, and rejecting the invitations of other children. These children were typically more withdrawn and avoidant, and their behaviors often impeded active participation in play.

Both a teacher version and a parent version of the rating scale were constructed and tested to make certain they held up to rigorous scientific standards. It was expected that information from home and school would be shared.

The rating scales were then used in a peer play intervention. The intervention consisted of three tasks: (1) selecting resilient peers, called Play Buddies, and the children with poor peer play skills, called Play Partners; (2) establishing collaborations with teachers to set up Play Corners for play interactions between the Play Buddy and Play Partner; and (3) identifying and training parent volunteers, called Play Supporters, to support the positive play interaction of the children in the Play Corner. The rating scales assisted with the identification of Play Buddies with high interactive peer play skills and Play Partners with highly disruptive and/or disconnected peer play behaviors. Observations were made of their play interactions. Indeed, with the help of their more resilient peers, the lower functioning Play Partners learned to engage in interactive and successful peer play (for a more detailed description of the intervention and the evaluation, see Fantuzzo, Coolahan, & Weiss 1997).

Given the salience of the developmental challenge of prosocial play for preschool-aged children, it is essential that early childhood educators learn about new ways to facilitate successful play experiences in their classrooms. Head Start children would benefit immensely from the integration of peer play interventions into their daily experiences. In addition, the importance of early peer play to later school success highlights the need to partner with Head Start families in order to maximize children's development and learning at home and school (NRC & Institute of Medicine 2000). ■

Interactive peer play in the preschool years is associated with school readiness– the development of early literacy skills, approaches to learning, and self regulation.

References

Birch, S. H., & G.W. Ladd. 1996. Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In *Social motivation: Understanding children's adjustment*, eds. J. Juvonen & K. Wentzel, 199-225. New York: Cambridge University Press.

Bredekamp, S., & T. Rosegrant. 1992. Reaching potentials through appropriate curriculum: Conceptual frameworks for applying the guidelines. In *Reaching potentials: Appropriate curriculum and assessment for young children*, vol.1, eds. S. Bredekamp & T. Rosegrant. Washington, DC: National Association for the Education of Young Children.

Bredekamp, S., & C. Copple, eds. 1997. *Developmentally appropriate practice in early childhood programs.* Washington, DC: National Association for the Education of Young Children.

Cochran, M. 1993. Public child care, culture, and society:

Crosscutting themes. In *International handbook of child care policies and programs*, ed. M. Cochran, 627-658. Westport, CT: Greenwood.

Corsaro, W. A., & K. Schwarz. 1991. Peer play and socialization in two cultures. In *Play and the social context of development in early care and education*, eds. S. Scales, M. Almy, A. Nicolopoulou, & E. Ervin-Tripp, 234-254. New York: Teachers College Press.

Creasey, G. L., P.A. Jarvis, & L.E. Berk. 1998. Play and social competence. In *Multiple perspectives on play in early childhood education: Inquiries and insights*, eds. O. N. Saracho & B. Spodek, 116-143. Albany, NY: State University of New York Press.

Denham, S. A., & R. W. Holt. 1993. Preschoolers' likeability as cause or consequence of their social behavior. *Developmental Psychology* 29 (2): 271-275.

DeRosier, M., J. B. Kupersmidt, & C. J. Patterson. 1994. Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child Development* 65: 1799-1813.

Fantuzzo, J., K. Coolahan, & A. Weiss. 1997. Resiliency partnership-directed intervention: Enhancing the social competencies of preschool victims of physical abuse by developing peer resources and community strengths. In *Rochester symposium on developmental psychopathology: The effects of trauma on the developmental process*, vols. 8 & 9, eds. D. Cicchetti & S. L. Toth, 463-490. Rochester, NY: University of Rochester Press.

Fantuzzo, J., J. Mendez, & E. Tighe. 1998. Parental assessment of peer play: Development and validation of the parent version of the Penn Interactive Peer Play Scale. *Early Childhood Research Quarterly* 13 (4): 655-672.

Fantuzzo, J., & V. Hampton. 2000. Penn Interactive Peer Play Scale: A parent and teacher rating system for young children. In *Play diagnosis and assessment*, eds. K. Gitlin-Weiner, A. Sandgrund, & C. Schaefer, 599-620. New York: Wiley.

Fantuzzo, J., & C. McWayne. 2002. The relationship between peer play interactions in the family context and dimensions of school readiness for low-income preschool children. *Journal of Educational Psychology* 94 (1): 1-9.

Fantuzzo, J., J. Mendez, & E. Tighe. 1998. Parental assessment of peer play: Development and validation of the parent version of the Penn Interactive Peer Play Scale. *Early Childhood Research Quarterly* 13 (4): 655-672.

Fisher, E. P. 1992. The impact of play on development: A meta-analysis. *Play & Culture* 5: 159-181.

Frost, J. L. 1992. *Play and playscapes*. Albany, NY: Delmar.

Gallagher, T. M. 1993. Language skill and the development of social competence in school-age children. *Language, Speech, and Hearing Services in Schools* 24: 199-205.

Garcia Coll, C. T., E. C. Meyer, & L. Brillon. 1995. Ethnic and minority parenting. In *Handbook of parenting: Biology and ecology of parenting*, vol. 2, ed. M. Bornstein, 189-209. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Goncu, A. 1993. Development of intersubjectivity in the dyadic play of preschoolers. *Early Childhood Research Quarterly* 8: 99-116.

Hampton, V. 1999. Validation of the Penn Interactive Peer Play Scale (PIPPS) for urban kindergarten children. Unpublished doctoral dissertation. Philadelphia, PA: University of Pennsylvania.

Hart, C. H., S. F. Olsen, C. C. Robinson, & B. L. Mandleco. 1997. The development of social and communicative competence in childhood: Review and a model of personal, familial, and extrafamilial processes. *Communication Yearbook* 20: 305-373.

Hartup, W. W., & S. G. Moore. 1990. Early peer relations: Developmental significance and prognostic implications. *Early Childhood Research Quarterly* 5: 1-17.

Hymal, S., C. Comfort, K. Schonert-Reichl, & P. McDougall. 1996. Academic failure and school dropout: The influence of peers. In *Social motivation: Understanding children's school adjustment*, eds. J. Juvonen & K. Wentzel, 313-345. New York: Cambridge University Press.

Kagan, S. L., E. Moore, & S. Bredekamp, eds. 1995. *Reconsidering children's early development and learning: Toward common views and vocabulary.* Washington, DC:

National Education Goals Panel.

Kupersmidt, J. B., J. D. Coie, & K. A. Dodge. 1990. The role of poor peer relationships in the development of disorder. In *Peer rejection in childhood*, eds. S. R. Asher & J. D. Coie, 274-305. New York: Cambridge University Press.

Ladd, G. W., S. H. Birch, & E. S. Buhs. 1999. Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development* 70 (6): 1373-1400.

Ladd, G. W., & C. C. Coleman. 1997. Children's classroom peer relationships and early school attitudes: Concurrent and longitudinal associations. *Early Education & Development* 8 (1): 51-66.

Ladd, G. W., B.J. Kochenderfer, & C. C. Coleman. 1996. Friendship quality as a predictor of young children's early school adjustment. *Child Development* 67: 1103-1118.

Ladd, G. W., & J. M. Price. 1987. Predicting children's social and school adjustment following the transition from preschool to kindergarten. *Child Development* 58: 1168-1189.

Lamb Parker, F., A. Y. Boak, K. W. Griffin, C. Ripple, & L. Peay. 1999. Parent-child relationship, home learning environment, and school readiness. *School Psychology Review* 28 (3): 413-425.

Levy, A. K., C. H. Wolfgang, & M. A. Koorland. 1992. Sociodramatic play as a method for enhancing the language performance of kindergarten age students. *Early Childhood Research Quarterly* 7 (2): 245-262.

Mize, J., & E. Abell. 1996. Encouraging social skills in children: Tips teachers can share with parents. *Dimensions of Early Childhood* 24 (3): 15-23.

National Association for the Education of Young Children. 1996. NAEYC Position Statement: Principles of child development and learning that inform developmentally appropriate practice. Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Available online at <*www.naeyc.org/resources/position_statements/dap3.htm*>.

National Association for the Education of Young Children, & National Association of Early Childhood Specialists in State Departments of Education. 1991. Guidelines for appropriate curriculum content and assessment in programs serving children ages 3 through 8. *Young Children* 46: 21-38.

Nicolopoulou, A. 1993. Play, cognitive development, and the social world: Piaget, Vygotsky, and beyond. *Human Development* 36: 1-23.

Parker, J. G., & S. R. Asher. 1987. Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin* 102: 357-389.

Pelligrini, A. D., & L. Galda. 1993. Ten years after: A reexamination of symbolic play and literacy research. *Reading Research Quarterly* 28 (2): 163-175.

Piaget, J. 1962. *Play, dreams, and imitation in childhood*. New York: Norton.

Powell, D. R. 1998. Reweaving parents into the fabric of early childhoods programs. *Young Children* 53 (5): 60-67.

Prince, C. 1992. *Reactions to the Goal 1 Technical Planning Subgroup report on school readiness*. Washington, DC: National Education Goals Panel.

Raver, C. C., & E. F. Zigler. 1997. Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly* 12: 363-385.

Rogoff, B. 1993. Children's guided participation and participatory appropriation in sociocultural activity. In *Development in context: Acting and thinking in specific environments*, eds. R. H. Wozniak & K. W. Fischer. Hillsdale, NJ: Erlbaum.

Shonkoff, J. P., & D. A. Phillips, eds. 2000. *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.

Slaughter-Defoe, D., & E. Brown. 1998. Educational intervention and the family: The Chicago tradition in policy and practice. *National Head Start Research Quarterly,* 1 (4): 39-111.

Sroufe, A. L., R. G. Cooper, G. B. DeHart, M. E. Marshall, & U. Bronfenbrenner, eds. 1992. *Child development: Its*

Continued on page 57

http://www.cs.umd.edu/hcil/kiddesign/cof.shtml

CHILDREN AS RESEARCHERS

Young children are often called natural scientists. The baby drops her rattle off the edge of the high chair to see what happens; the toddler plays in the sand box and puts sand in his mouth to discover its taste; the preschooler wonders "Why is the car red? Where does the sun go at night?" in an effort to figure out how the world works. Children are inclined to be curious, explore, ask questions, and search for answers. These very same qualities describe adult researchers, too. A study on educational technologies at the University of Maryland has enlisted kindergarten children as design partners. Their drawings and comments are important pieces of research data; their ideas are helping to shape the research process. Maybe you, too, can think of ways to involve children as active participants in your next research investigation.–*Editor*

THERE IS ONGOING DEBATE as to what role technology should play in the classroom. The concerns become ever greater when researchers discuss early childhood education. We are exploring the possibilities for the Classroom of the Future by partnering with students and teachers at The Center for Young Children in College Park, Maryland and Yorktown Elementary School in Bowie, Maryland.

The aim of this five-year National Science Foundation funded project is to foster innovation in both the development and use of new educational technologies. Research in the area of educational technologies generally focuses on the impact technologies can have on children and teachers, as opposed to the impact that children and teachers can have on the development of new technologies. We believe both the impact of the teachers and students and the impact of the technologies are critical to our understanding of how technology shapes our learning environments. It is not enough to think about how many desktops or laptops should be brought into the classroom or how we can train teachers to use them. We need to ask broader questions: Why should technologies be integrated into the curriculum? How can children and teachers share what they know about their technology needs? How can we change technology to support educational experiences in the classroom? How does the use of technology change our learning environments?

The goals of the Classroom of the Future Project fall into two categories: technological and educational. Therefore, we expect the outcomes of our research will include a better understanding of the input and output devices necessary for children to use technology which is not relegated to the desktop, as well as a method to effectively use these technologies in the classroom. Our team anticipates developing new "embedded" technologies that can be a seamless part of any physical object in schools. Children's activity patterns will be supported with technologies that suggest active exploration, experimentation, and play. In regards to educational impact, we expect to understand how technology can support learning even in early childhood education environments. We will explore what technology infusion methods need to be developed by kindergarten teachers in a technology-rich learning environment.

Figure 1.

Background

TECHNOLOGY IS BECOMING A VISIBLE PART of children's lives. From classroom settings to home use, computers are now a part of how children learn, play, and communicate. A recent national survey by the Kaiser Family Foundation of over 1,000 children ages two to seven revealed that 62% of children have computers at home. According to the National School Boards Foundation, the most common reason parents cite for buying home computers is their children's education. Our schools are even being judged based on the ratio of students to computers. This ratio

Figure 2.

has been used to determine the ability of schools to provide "quality" education. Computers are an important part of children's lives, even those young enough to attend pre-school.

What is not as clear is when children should have access to these technologies. Educators are also questioning what technologies children should explore. Many doubt whether placing a computer "box" on a desktop is an appropriate way to spend time with a young active child. According to the National Association for the Education of Young Children, educators should study the effects of technology and use technology if it can benefit children.

There is a clear mandate from the education community to question what technologies get made and how they are used with children. At the same time, technologists need to question what educational strategies their teaching tools promote. Today there is an emphasis placed on learning models that support the active construction of knowledge and skills. There has been a shift from educational environments which support the passive

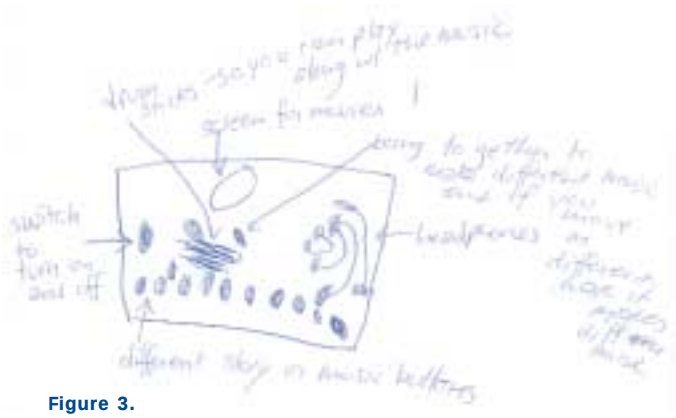

Figure 3.

acquisition of isolated facts, to environments in which the learner actively explores the world and constructs their own internal models of understanding. From an early age, children physically explore by building with blocks, digging in sandboxes, and drawing new ideas. Activities such as these support the development of skills which include: creative problem-solving, collaborative learning, expressive design, and conceptual abstraction.

Goals

* Understand the unique needs of young children (ages 3-6) in learning environments.
* Develop new technologies in partnership with children and teachers.
* Develop strategies for teaching in a technology-infused early childhood education environment.
* Understand the impact these technologies can have on young children and their early childhood educators.
* Understand when technology is an appropriate catalyst for early childhood education.
* Develop innovative technologies that fully support user needs by involving the user in the design process.…

Current Work

OUR RESEARCH BEGAN in January of 2001. Since that time, we have observed all of the classrooms at the CYC and the four kindergarten classrooms at Yorktown Elementary School. Our goal has been to understand the activity patterns of the children and teachers and to understand how they use technology. We have conducted two sets of interviews at the CYC and one set of interviews at Yorktown. In addition, we have had several meetings with the teachers at both schools. Together we have discussed new approaches to integrating technology into the curriculum. Our team introduced software applications that the teachers can use with their classes. We are now analyzing the data we have collected.

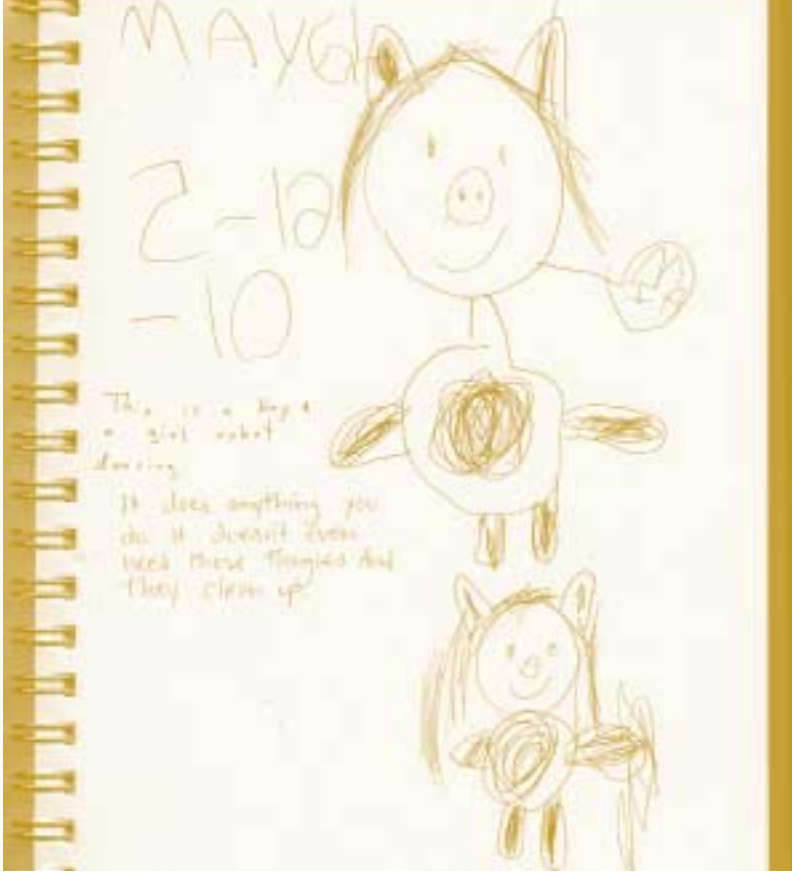

Figure 4.

We began a six-week-long pilot design team with a group of six five-year-old children at the CYC. Based on this experience, we believe that children as young as five years old can be partners in the design of new technologies.

During these sessions, we tested current technology, wrote and sketched notes, and built low-tech prototypes. The goal of this pilot program was not to build any new technology but to see if the children could view themselves as design partners. We were particularly interested to see if children could take an active role in the group by expressing their thoughts on the design process and on the technologies they tested. Working with younger children made it necessary to adapt the design process that we use with our seven- to eleven-year-old partners.

Kindergarten Design Partner Activities

AN EXAMPLE [OF A] DESIGN ACTIVITY we did with the kindergarten team is a re-design of MusicBlocks. MusicBlocks is a toy that enables very young children to create their own compositions by manipulating and rearranging physical blocks. First, each child used MusicBlocks and decided what she/he liked and didn't like about it. Then, each child sketched what they thought MusicBlocks should be like in the future. [See Figure 1 for] sticky notes one child made detailing what she liked and didn't like about MusicBlocks.

[Figures 2 and 3] are sketches that two five-year-old children made in their journals. Their drawings show what the children would like the "Music Blocks of the future" to be like.

Our kindergarten team also worked with robots as a design exercise. First they played with our robot that helps children tell stories and then they played with ToyMax's commercial R.A.D. robot which can pick up and move small objects. Again, we wrote sticky notes about what we did and did not like about the robots. Then the children made sketches of what they would like their robots to be able to do in the future, which the adults annotated. Below are two children's...annotations.

"These are two robots dancing." [Figure 4]

"It does anything that you do." [Figure 5]

Figure 5.

Design Process with Kindergartners

WORKING WITH THE KINDERGARTEN DESIGN partners at the CYC taught us that our design methods had to be adapted to fit the unique needs of kindergartners. For example, we made design tasks easier for the kindergarteners by asking them to write only two sticky notes with their likes and dislikes, as opposed to three that our seven to twelve year-old design partners write. We have found it most effective when the kindergarten children drew on the sticky notes and the adults transcribed the children's descriptions of their drawings. We also adapted the design process for young children by asking them to sketch their ideas with pen and paper before they built low tech prototypes. This helped them to focus on the design process. It is challenging for kindergartners to stay focused, [and] therefore, we met for only two hours a week (our lab design team meets for three hours a week). ■

For more information, contact Allison Druin, Assistant Professor, Department of Human Development, University of Maryland, College Park. T: 301-405-2790; E: allisond@umaics.umd.edu.

HOW A RESEARCH PROCESS AFFECTED PRACTITIONERS

The research process brought frustrations, but mostly benefits, for the Head Start program. **by Corinne Lewkowicz and Stacy Dimino**

RESEARCH IS A DYNAMIC PROCESS, affecting both researchers and participants (Wagner 1997; Howard, Lewkowicz, & Dickinson in press). Issues affecting the relationship are both internally and externally imposed. Internally, agencies have other bodies to which they must report (e.g., internal review boards, boards of directors); externally, agencies must offer proof of efficacy (e.g., research results or child outcome measures) to funding agencies or peer-reviewed journals. External constraints are particularly important for agencies that provide Head Start services because they use government resources. Therefore, accountability is critical.

First, we will describe the research process—including its frustrations—that brought us together: a nonprofit agency that offers Head Start services and the research consortium whose specific goal was to study Head Start quality. Then, we will focus on how we problem-solved and what we learned from our collaboration.

The classroom environment is assessed as part of the program's self-evaluation

Photo courtesy of Communities United, Inc.

The Research Partners

COMMUNITIES UNITED, INC. (CUI) provides child care services, including Head Start, to 11 communities in the greater Boston area. Founded in 1970 by a group of parents, volunteers, and town officials, CUI's expressed goal is to provide comprehensive education, health, and social services to economically disadvantaged children and their families. Additionally, CUI is the lead agency for five Community Partnerships for Children (CPCs), a statewide effort to provide child care coverage for working parents whose incomes are too high to qualify for Head Start, yet too low to cover child care costs.

In 1995, CUI and the New England Quality Research Center (NEQRC) began a five-year collaboration examining the efficacy of Head Start programs. The NEQRC was part of a larger Head Start Quality Research Center (QRC) Consortium that included the High Scope Educational Foundation (Ypsilanti, Michigan), Georgia State University, and the Frank Porter Graham Child Study Center at the University of North Carolina at Chapel Hill. QRCs were funded by the Administration on Children, Youth and Families (ACYF) to respond to questions about the quality of Head Start programs nationwide.

The NEQRC itself was part of the Education Development Center's (EDC) Center for Children and Families. In addition to EDC, its local research partners included the Massachusetts Society for the Prevention of Cruelty to Children, Harvard University, and Boston College. The primary goal of the NEQRC was to examine children's language, literacy, and social development related to Head Start services. Not surprisingly, this overarching research agenda corresponded directly to the interests of the individual members of the NEQRC.

The Stated Goals

AS A DIRECT SERVICE AGENCY, CUI was primarily interested in the provision of high quality services to children and families in their programs. While CUI staff appreciated the need for research that illuminated the issues affecting the national Head Start population, their primary concern was the children in their care. CUI staff were willing to contribute to generalizable research findings, but a more pressing need was to better understand their classrooms and children. They wanted to learn specific information that could substantially improve the lives of the children in their programs. CUI staff are direct-care providers, a role that is necessarily time- and labor-intensive

and, therefore, leaves little time to participate in research that is not directly connected to their immediate work.

CUI senior management articulated their goals for quick data turnaround and classroom- and child-specific data. There were two compelling reasons: CUI faced both internal (i.e., the Board of Directors) and external (i.e., the Head Start Bureau) pressures to document the efficacy of its programs, and staff members wanted to respond to situations and/or needs that became evident during data collection. However, CUI's goals were incompatible with the nature of the research process. Data turnaround is necessarily slow. Plus, the requirements of a large sample for statistical analyses and of participant confidentiality preclude the sharing of site- or child-specific information.

These disparate goals, not surprisingly, led to frustrations for both sides (Howard, Lewkowicz, & Dickinson in press). CUI was frustrated with the length of time required for data analyses and with the lack of program-specific findings. Furthermore, as the research process evolved, and in response to questions posed by various agencies (e.g., funding agencies, the Department of Education), CUI management had an even greater need for tools that could answer program-specific questions. As one manager said, "Sometimes it felt as if we were just having data extracted with nothing gained except broadly helping Head Start." EDC, in turn, was frustrated by the research constraints that made it impossible to respond to CUI's pressing needs.

CUI Takes the Initiative

In response to these frustrations, CUI made several adaptations in the research process. The agency identified methods and tools that allowed it to collect and analyze data for internal program evaluation and for reports to external agencies. In short, CUI became more independent in terms of defining and executing an internal research process that would address its needs.

One of CUI's first steps was to adopt The Early Childhood Environment Rating Scale-Revised (ECERS-R) for program-wide assessment (Harms, Clifford, & Cryer 1998). The

Photo courtesy of Communities United, Inc.

Head Start children enjoy mixing playdough

NEQRC had introduced this Scale as an overall measure of classroom quality. But concerns arose when CUI management was not able to identify individual classroom performance on the ECERS-R. When one classroom scored significantly lower than others, its identity could not be revealed by EDC due to confidentiality restrictions. Therefore, CUI could not target support to a classroom in great need and improve its service to children and families. CUI concluded that the Scale, when used by EDC for research purposes, was only useful as a very general measure of overall program quality.

CUI management was also concerned about the "snapshot" nature of the Scale and its scoring system. EDC used only the language and literacy subscale of the ECERS-R; other aspects of the classroom environment were not scored. However, CUI thought the "full classroom picture" was needed to assess program quality.

EDC staff responded to CUI's concerns by training CUI staff in administering the ECERS-R in its entirety. The Scale is now used by CUI as part of its annual program self-evaluation. All aspects of the classroom environment are assessed, and data on individual classrooms are available to CUI management. It is now possible to track classroom and program quality from year to year and to point to areas of strengths as well as priority

Continued on page 56

OUR EXPERIENCES AS AN EHS RESEARCH SITE

Family Star faced many challenges as we entered the unexplored territory of mounting an Early Head Start research study. **by Terry J. Hudgens, Lereen D. Castellano, Paul Spicer and Robert Emde**

OUR PROGRAM BEGAN when a small but passionate group of inner-city Denver parents and educators joined together to stop the spiraling decline of their community and to provide their young children with a more promising future. This dedicated group successfully closed down a crackhouse located across the street from the local elementary school. They reclaimed and renovated the vacated building, transforming it into the Family Star Montessori Infant/Parent Education Center.

In April 1996, Dr. Robert Emde visited our center and witnessed something in the Montessori experience—delivered by this grassroots organization—that amazed him. He observed a two-and-a-half-year-old child concentrating on a bead-stringing activity for 20 uninterrupted minutes. Other children were involved in a variety of activities with pleasurable concentration. All this took place in the midst of a neighborhood troubled by violence and drug abuse. This contrast sparked Dr. Emde's curiosity and heightened his interest in understanding the socio-emotional as well as the cognitive impacts on children in this program who were eligible for Early Head Start (EHS). Thus, Family Star became an Early Head Start site, and Dr. Emde's team at the University of Colorado became its research partner.

Toddlers play together in Early Head Start

Photo courtesy of HSNRC.

Our Early Head Start program is now located in northwest Denver, serving a largely Latino population of 75 children and pregnant women. We hire women from surrounding neighborhoods. For many, this is their first opportunity for professional development. Family Star Early Head Start provides a dual language Montessori approach. The marriage of Montessori and Early Head Start has made a significant impact on our program design and comprehensive services. Our organizational structure includes family service and education teams, an infant mental health specialist coordinating disabilities services, a health/nutrition coordinator, a male involvement outreach coordinator, and a special projects coordinator developing family literacy. We also provide ongoing forums for all staff that are designed to maintain communication and promote staff development.

During the first months, we spent time building a relationship with our university-based researcher partners. We visited the university lab used for family visits and learned about the different assessments and measures for the local and national research. In turn, our research partners conducted focus groups in our community, under the direction of Dr. Paul Spicer, in order to review their research measures for cultural appropriateness. Community input helped the research team make their lab protocols more respectful of Latinos and the Montessori approach. These modifications ranged from changing language (e.g., using the words "free time" rather than "play time," "materials" in place of "toys") to changing the pace and formality of the lab visit in order to make families feel more comfortable.

Initial Challenges with Research

WE FACED MANY CHALLENGES as we entered the unexplored territory of mounting an Early Head Start research study. For research purposes, we had to recruit within narrow age spans to accommodate the flow of children between classrooms. Furthermore, all children had to be enrolled before the age of 12 months. This meant that ongoing re-forecasting was necessary when monthly enrollment projections were not met.

Initially, community agencies and parents expressed con-

cern about the random assignment process that is necessary for rigorous research studies (i.e., the applicant stands a 50% chance of being assigned to the comparison group rather than the program). In order to address this concern, Councilwoman Deborah Ortega hosted an orientation for northwest Denver community representatives. Twenty-six people attended to present their questions and concerns. Through this venue, we addressed their concerns and informed them of the potential long-term benefits of the study for children and families.

Several other recruitment issues captured our attention during the start-up phase of the study. Initial recruitment was interrupted while we awaited a corrected Spanish version of the HSFIS application and enrollment forms. Family Star staff and researchers worked together to prepare the new edition. Disability recruitment was another frustration because many young children with special needs were assigned to the comparison group. However, through the coordinated problem-solving of research and program staff, we resolved many of these thorny recruitment issues in ways that were mutually acceptable.

Programmatic Benefits of Research

THE RESEARCH PARTNERSHIP benefited our program in several ways. Dr. Emde helped us acquire an infant mental health specialist through The Harris Infant Mental Health Program at the University of Colorado. The multiple benefits of having an on-site mental health manager were immediately evident. Mary Ervoline was an experienced social worker who helped us address socio-emotional issues both in the classroom and with Early Head Start families.

The research partners also had "hands-on" contact with the staff. Dr. Jon Korfmacher met with teachers and co-designed a daily activity feedback form. He also provided Ages and Stages Questionnaire training. Co-facilitated by Drs. Emde and Spicer, a theory of change discussion allowed staff to share their impressions of families' experiences at Family Star Early Head Start. Members of the research team attended various meetings and functions as true Family Star supporters. They also helped us identify additional funding sources for our growing program.

Our Continuous Improvement Team—the Center for Human Investment in Policy at the University of Colorado at Denver—met with us regularly. They helped us identify areas of need and plan next steps. Together, we developed a continuous improvement matrix based on program objectives and activities in child, family, and staff development and community building. Our Continuous Improvement Team also conducted the Infant and Toddler Environment Rating Scale (ITERS) twice a year, helped create our database tracking system, identified technology needs, and was vital to the success of our planning process. Their support and guidance have been invaluable.

The Early Head Start Research Consortium meetings, held twice a year, brought researchers and program directors from all the EHS research sites together. As we enter the final phase of data gathering, the research consortium meetings are taking on new importance. The results of the study, already released in an interim report, are quickly becoming a reality. Plans for a longitudinal study of the children who participated in the EHS evaluation have crystallized. They will be followed up before and after they enter school. Of course, we are eager to see how they fare.

Today, Family Star Early Head Start is in a unique position. In a mere four years, we have become a community focal point for innovation in education, child advocacy, parent involvement, and neighborhood development. We recently purchased our building and are mounting a capital campaign to raise more than a million dollars in renovation funds. Our vision is to have a remodeled facility ready to serve children, birth through age six, in a blended program in a few years. We now embrace research as a necessary ingredient for expansion, continuous program improvement, and maintaining quality services for the families and children we serve. ■

Terry J. Hudgens *is Director of Family Star Early Head Start. T: 303-477-7827; E: terry@familystar.net.* Lereen D. Castellano *is Executive Director of Family Star. T: 303-477-7827; E: lereen@familystar.net.* Paul Spicer *is an Assistant Professor in the Dept. of Psychiatry at the U. of Colorado Health Sciences Center. T: 303-315-9256; E: paul.spicer@uchsc.edu.* Robert Emde *is a Professor in the Dept. of Psychiatry, U. of Colorado Health Sciences Center. T: 303-315-7311; E: Bob.Emde@UCHSC.edu.*

BUILDING LOCAL LABORATORIES

Local programs are increasingly implementing their own reserach initiatives. **by Brenda Jones Harden and Danielle Rock**

THE GREAT LEGACY of the Head Start program springs from many sources, such as its role as a national laboratory for early childhood research. Like any national policy or programmatic initiative, the early childhood research that has been a constant in Head Start has required the commitment and investment of local programs. Many Head Start policy-makers, administrators, and practitioners at the local level have been convinced that the blending of practice and research knowledge has incredible potential to produce programs of the highest quality (Denner et al. 1999; Zigler & Styfco 1998, 2000). The goal of this article is to delineate the important lessons that can be learned from the integration of research and practice in Head Start programs.

Because of our belief that practitioner input has been essential to the success of any research effort, we began the process of writing this article through consultation with the field. Nominated by regional office staff and Training /Technical Assistance (T/TA) providers, Head Start programs from across the nation were selected that had successfully engaged in the research enterprise. We particularly sought out programs that were *not* part of a national research project. Program administrators were asked to respond to a series of questions about the "what," "who," "how," and "why" of their research endeavors. Their answers follow. Based on the work conducted in these local programs, we then highlight the key lessons regarding research.

How do we begin the research process?

Identifying a "theory of change." Prior to planning the research project, a program should identify its **"theory of change."** Put simply, a program's theory of change reflects its goals, related outcomes, and the practices it will implement to achieve these outcomes. Programs can learn from the efforts of the Early Head Start research sites, each of which identified the theory of change that guided their work during the initial phases of the project. A "logic model" or type of flow chart that connects the goals of the program, the specific services that follow from the goals, and the potential benefits for families and children that result from each service is a concrete way to represent the theory of change. Table 1 offers a snapshot of an abbreviated logic model based on current Head Start Performance Measures.

TABLE 1

Goals	Objectives	Services	Outcomes
Develop children's literacy	Children will know/ appreciate the function of books	Teacher will read to children & describe book concepts; children will have opportunity to explore books	Children will show interest in a specific book, will engage in pretend reading, will ask to be read to and know book content
Promote children's social-emotional development	Children will exhibit age-appropriate self-control	Teacher will model self-regulation, will encourage child to express emotion verbally, will provide peer experiences for children to learn empathy, will set appropriate limits, will be responsive to children's emotional needs throughout day	Children will increase their use of words to express negative emotion instead of the body, their capacity to think about the needs of others, their compliance with rules, and their ability to be calm in times of frustration

Ensuring staff and family participation. Just as national initiatives cannot be implemented without local program buy-in, administrative-level decisions at the program level cannot be carried out unless front-line staff and managers are willing to support them. Thus, research projects should be conducted with the **full participation of all staff and parents**. Most of the programs surveyed obtained staff buy-in through an emphasis on accountability to funding sources. The Community Services for Children Head Start program in Allentown, Pennsylvania, experienced the gradual evolution of staff buy-in regarding research. In the beginning, staff perceived the research as extra work. With continuing feedback about the results of the research, they have begun to see the benefits of their efforts. Additionally, the amount of work assigned staff was purposely limited by stream-

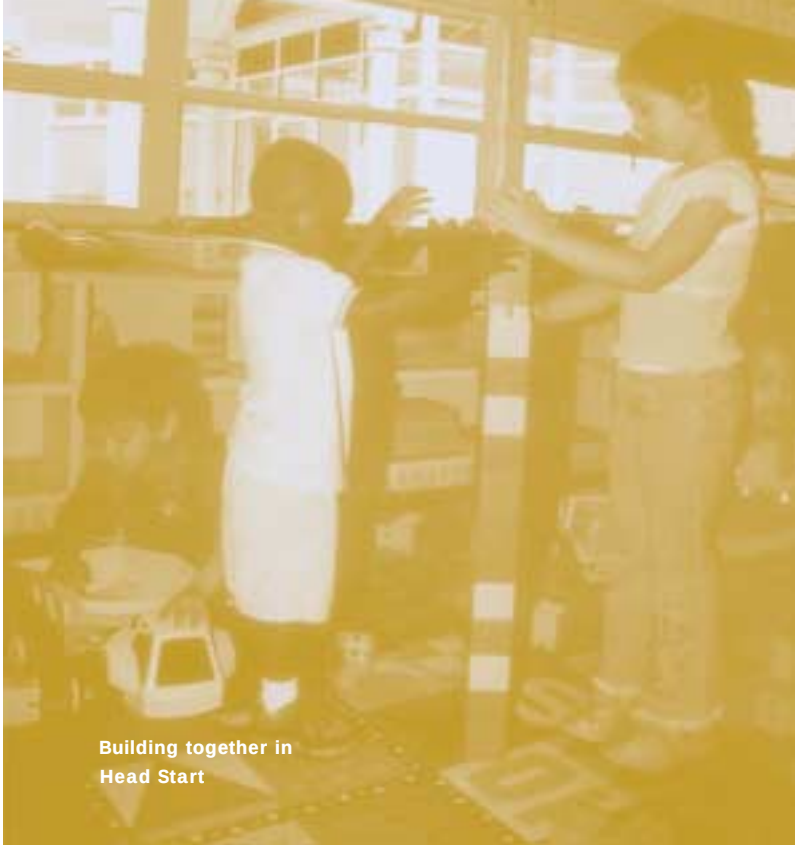

Photo by D. Mentzer. Higher Horizons EHS-HS.

Building together in Head Start

lining data-gathering procedures and making them user-friendly and by assigning the bulk of study tasks to the researchers.

Other programs devoted staff administrative and professional development meetings to discussing staff perceptions of research, ideas about how the research should be implemented, and strategies for how to balance their involvement in the research and their work with program participants. Policy councils and parent committees are similarly used by programs to enhance parent and community investment in the research. The Tri-County Child and Family Development Council Head Start program in Evansdale, Iowa, goes one step farther and gives parents ready and full access to all the data they collect.

Devising research questions. An important first step in any research endeavor is to outline relevant **research questions**. It is often helpful if a research consultant is engaged at this point. Programs should ask themselves what it is they want to know—for example, do they want to conduct an assessment of the needs and resources of the participant population or to determine what services are working for which participants? These research questions should be jointly developed by practitioners and researchers and made concise and measurable. Some programs want to answer policy-relevant questions, such as the Northern Delaware Early Head Start's interest in knowing the effectiveness of their partnerships with community-based child care programs. In the Bedford-Fulton Head Start program in Pennsylvania, administrators were interested in the capacity of staff to deliver services. Their research questions, and subsequently the evidence to answer those questions, led the program to alter the content and process of staff supervision and training. Other programs are interested in learning more about participant children's developmental processes. The A.W.A.R.E., Inc. Early Head Start program in Butte, Montana, is considering research projects assessing attachment and emotion expression in infants.

How do we implement the research project?

Identifying an external partner. Although many programs engage in research efforts on their own, it is much more likely that research will be conducted effectively if the program chooses an **external research partner**. Research conducted in partnership with external experts generally has more credibility in terms of its methodology and its findings. Local universities and independent research firms are an excellent source of potential individuals who can partner with the program to conduct descriptive or evaluative research. The majority of the programs surveyed for this article opted to devote a portion of the programmatic budget to a research consultant. For example, the Head Start Child and Family Development Program of Hastings, Nebraska, has used the same university-based research partner for more than a decade. They have jointly conducted several policy-relevant studies (e.g., inclusion, state early childhood procedures), as well as evaluation of programmatic initiatives (e.g., family transition and empowerment).

Establishing a method for conducting the research. With the technical assistance of the research partner, a **rigorous methodology** for answering the program's research questions should be selected. This process includes identifying measures that are participant- and program-friendly. In other words, these measures should be easy to administer and should have been used with the cultures of the Head Start program's participants. Using measures that have been standardized (i.e., already tested with appropriate populations) is always preferable to creating new measures.

The Columbia University Head Start program in New York City is using several standardized measures to assess participant

children's development, including such assessments as the Woodcock-Johnson Psychoeducational Battery - Revised (Woodcock & Johnson 1990), Child Behavior Checklist (Achenbach 1991), Social Skills Rating Scale (Gresham & Elliott 1990), and the Developmental Test of Visual Motor Integration (Beery 1982). An important aspect of their use of these measures is to reflect upon their cultural appropriateness with immigrant and other families from minority groups.

Many Head Start programs use previously established measures to assess the child development environment. The Early Childhood Environment Rating Scale - Revised Edition (ECERS-R; Harms, Clifford, & Cryer 1998) is a very popular measure used for this purpose in national and local research studies. The Philadelphia, Pennsylvania, Public Schools Head Start program recently employed their research partner to observe and rate 80 classrooms using the ECERS-R. The results were shared with the teachers and pointed to the need for more developmentally appropriate activities and materials. The research led to improvements in the classroom environments.

Adult-child interaction is key to children's learning and development

Photo courtesy of HSNRC.

Similarly, the procedures used for collecting the information should be rigorous. Some programs use technologically sophisticated ways to collect data. For example, the Upper Des Moines, Iowa, Opportunity Head Start uses video cameras in each classroom to support assessments of the environment. Programs may elect to use program staff, research staff, or both to collect data. The Bedford-Fulton Head Start program in Pennsylvania uses Family Development Specialists to collect family data and a contract employee to conduct the child assessments.

Despite the importance of collecting a wide range of data, data collection should not create an undue burden on the program. Interviews that last several hours are difficult for the participants and the staff involved. The literacy levels of parents need to be considered as well. It is unfair to the parent, and also potentially problematic for the research, if the parent has to read questions that may be too complex. Many researchers opt to read all the questions to all parents to avoid asking parents about their ability to read.

Some programs have decided to provide incentives to families who participate in research. This is not always necessary; in some programs, receipt of services requires participation in the research. This issue is much more complex when control or comparison groups, who do not receive services, are utilized. Conventional thinking is that these families should be provided some incentive or remuneration for their time. If not, the participation rate needed for study viability may not be obtained. At the very least, staff and families should be recognized for their willingness to participate in the research effort. For example, in the Upper Des Moines Opportunity Head Start program in Iowa, staff are recognized with corsages and monetary rewards. Feedback about the research is given to staff through reflective supervision and peer mentoring. Similar strategies can be used to provide recognition and support to parent participants in the research process.

Handling and analyzing data. A difficult but essential task of the research process is **managing, analyzing, and summarizing** data. Many programs rely on HSFIS or other data management systems to store aggregate data (e.g., statistics on the number of children in center-based care, the number of families receiving home visits, etc.). The Drake University Head Start program in Iowa has employed an information technology specialist to collect and manage aggregate data for the program. The Philadelphia Head Start program, which is part of the

Philadelphia Public Schools, has access to data files that the school system maintains. This allows the program to engage in follow-up research by assessing the academic skills and functioning of former Head Start children.

For more specific research efforts, the program should devise a way to maintain the data in a confidential manner. Protection of the confidentiality of research participants cannot be overemphasized. Questionnaire and videotape data should be kept in locked cabinets in rooms that are not used by program participants. Identifying information should not be on any of the data, if possible. Families should voluntarily agree to be part of the study and sign a research consent form, different from the program service participation form. If a research partner is used, often the research project has to be evaluated by an Institutional Review Board (IRB) to make certain that the rights of research participants are protected.

It is beneficial for programs if the data analysis is performed by someone with statistical expertise. For large-scale Head Start studies, statistical consultants and staff persons are hired to guide and complete data analyses. However, for most program-level studies, the research consultant often has sufficient expertise to conduct the necessary analyses. Data for the Community Services for Children Head Start program in Allentown is managed and analyzed by its research partners at the Pennsylvania State University. They provide written feedback annually to the program, which, in turn, contributes to program planning.

How do we make the research meaningful to our program?

Using program evaluation. A major goal of many Head Start studies is to evaluate program effectiveness. Although many scholars and advocates argue that the benefits of Head Start have been clearly documented (see Zigler & Styfco 1998; 2000; Oden, Schweinhart, & Welkart 2000; Schaefer & Cohen 2000), critics of the program still question its benefits to families and children. To derive credible results from an effectiveness study, programs should not just assess how participant children and families progress over time. A comparison or control group should also be utilized. Evaluations of programs with a randomly selected control group (i.e., eligible participants are randomly placed in a group that receives Head Start services or a group that does not receive services) are generally far too expensive for individual programs to conduct. Large-scale impact studies are often funded to use this methodology. In some instances, local private or public funders have assisted local programs in conducting such evaluations.

In the main, individual programs interested in conducting rigorous evaluations of effectiveness elect to use a comparison group that comprises individuals who are similar to the ones receiving Head Start (e.g., similar ages, ethnic backgrounds, income levels, etc.). Each of these groups is assessed prior to the time when the

STEPS TO BUILDING A LOCAL HEAD START PROGRAM OF RESEARCH

- make an administrative commitment to incorporating research into your program
- identify a theory of change (i.e. link goals, services, and outcomes)
- ensure staff and family participation; obtain their "buy-in"
- outline the questions you want to have answered by research
- identify an external research partner (e.g. University researcher)
- establish a methodology for conducting the research
- ensure that the methods are credible in the research community
- select program-friendly and participant-friendly assessment tools
- establish procedures that are less burdensome to staff and participants
- provide incentives to staff and participants (concrete or psychological)
- create a data management system
- obtain support for data analysis and summary (e.g., use research partner)
- make the research meaningful for Head Start service delivery
- evaluate the effectiveness of specific aspects of your program or as a whole
- link research with the Head Start Program Performance measures and the Outcomes Framework
- work toward continuous improvement of your program

Head Start group receives services and again, when services are terminated for the Head Start group (pre- and post-test design). The state-funded home-based Early Head Start program of the Tri-County Child and Family Development Council in Iowa is comparing Head Start preschoolers who had received Early Head Start services to Head Start preschoolers who did not.

The research project of the Head Start program in the Kankakee School District, Illinois, evolved into a comparison-group design evaluation. The program initiated a local "impact" project in which they followed children through the third grade. They were interested in evaluating whether Head Start children had a more successful school experience (i.e., scored at or above the 50th percentile on the Iowa Test of Basic Skills). After two years of using a simple pre-test/post-test design, the program determined that the study would be more beneficial if it incorporated a comparison group. With the support of a research network that includes the regional T/TA providers and the University of Cincinnati Evaluation Services Center, this Head Start program initiated and implemented a rigorous evaluation design (i.e., comparison group pre-test/post-test follow-up).

Focusing on performance measures and outcomes. Effectiveness research dovetails with the Head Start Bureau's current emphasis on **performance measures and outcomes**. Two Information Memoranda, ACYF-IM-HS-00-03 and ACYF-IM-HS-00-18, provided guidance to programs for assessing outcomes and performance-based standards pertaining to the new Head Start legislation, as well as Head Start Bureau policy. The goal of this initiative is to incorporate child outcome data into program self-assessment and continuous improvement. Outcomes have to be evaluated in eight domains—language development, literacy, mathematics, science, creative arts, social-emotional development, approaches to learning, and physical health and development. A research partner can be extremely beneficial to programs as they endeavor to meet the requirements of this mandate.

For example, the Youth in Need Head Start program, in concert with researchers at Washington University in St. Louis, has created a checklist of nearly 30 outcome domains and is currently gathering tools to assess each domain. The Eagle County Head Start program received a Colorado Children's Trust grant to hire a researcher who has developed a tool to measure children's and families' progress toward reaching outcomes identified by the program and the Head Start Bureau.

Many programs have integrated research efforts regarding Head Start outcomes with their state and local early childhood outcomes initiatives. In Philadelphia, the school district's efforts on early literacy and Head Start's emphasis on literacy outcomes led to a citywide task force on early literacy that developed strategies for tracking children's progress toward literacy outcomes.

The Sacramento Employment and Training Agency Head Start program in California has made great strides in the outcomes area as well. With the assistance of a research partner, they developed a framework reflecting the Federal Head Start Bureau outcomes and state-mandated outcomes for preschool programs. An important component of their work was a pilot study with teaching staff that tested their use of a detailed measurement tool with specific indicators in multiple developmental domains. In Baltimore, St. Bernardine's Head Start is working with Head Start programs across Maryland to develop a statewide outcomes framework that blends with the national outcomes framework. The evaluation of programs' progress toward achieving the outcomes has been identified as a priority.

Local programs provide evidence that research can be used to inform program improvement and outcome achievement.

Ensuring continuous improvement. Finally, researchers in Head Start place a high value on the **programmatic implications** of the research they conduct. In other words, the research is not meaningful unless it informs the development of a high-quality Head Start program. This exploration of the

For further information about local programs' experiences with research, contact the following contributors to this article.

ALSM Children's Services
Debra Mock / Leah Pepple
231 South Juliana Street
Bedford, PA 15522
(814) 624-3200

A.W.A.R.E. Inc. EHS
Tom Richards
237 East Mercury Street
Butte, Montana 59701
(406) 782-0455
trichards@aware-inc.org

Columbia University Early Head Start
Dr. Carmen Rodriguez
601 West 168th Street
Suite 42
New York, NY 10032
(212) 923-5237
cr14@columbia.edu

Community Services for Children (w/ Penn State University)
Paula Margraf
1520 Hanover Ave.
Allentown, PA, 18109
(610) 437-6000

Drake University Head Start
Georgia Sheriff
3206 University Avenue
Des Moines, IA 50311
(515) 271-1854

Eagle County EHS
Rosie Moreno
P.O. Box 660
Eagle, CO 81362
(970) 328-8827

Head Start Child & Family Development, Inc.
Belinda Rinker / Deb Ross
123 Marian Road
Hastings, NE 68901
(402) 462-4187
b_rinker@alltel.net
Debross@alltel.net

Kankakee County Head Start
Mary Marx
Evaluation Services Center
University of Cincinnati
P. O. Box 210105
Cincinnati, OH 45221-0105
513-556-3750
marxml@ucmail.uc.edu

Kankakee County Head Start
Rebecca McBroom
Proegler School
710 North Chicago Avenue
Kankakee, IL 60901-2174
(815) 933-0773
becky-mcbroom@k111.k12.il.us

Northern Delaware Early Head Start
Dr. Martha Buell
316 Allison Hall
Newark, DE 19716
(302) 831-0584

Philadelphia Public Schools Head Start
Jennifer Plummer-Davis
Stevens Administration Building
1301 Spring Garden Street
Philadelphia, PA 19123
(215) 351-7060

Sacramento Employment and Training Agency
Joann Ingman
1122 Del Paso Blvd.
Sacramento, CA 95815
916 263-3884
JOANN@headstart.seta.net

St. Bernardine's Head Start
Angela Ligon
3814 Edmondson Avenue
Baltimore, MD 21229
(410) 233-4500
ALigonad@aol.com

Tri-County Child and Family Development Council
Kim Young Kent
P.O.Box 3338
Evansdale, IA 50707
(319) 235-0383

Upper Des Moines Opportunity, Inc.
Julie Edwards
216 Sixth Avenue East
Spencer, IA 51301
712-264-8859

implications of the research evidence is an essential component of the process that is often referred to as **continuous program improvement.** Through research evidence about the needs of families or the effectiveness of specific services, Head Start programs can continually modify and progress toward the goal of enhancing the development of children and families. Continuous improvement was central to the research initiatives of several Head Start programs. In Illinois, the Kankakee Public School's Head Start program developed a self-assessment tool as part of their research effort. The findings were used to identify technical assistance needs and led to changes in the delivery of program services. In the Eagle County Early Head Start program (Colorado), a survey of participant families led to modifications in the parent-child group socialization. The Community Services for Children Head Start program in Pennsylvania restructured several staff positions based on feedback received from programmatic research. In the Philadelphia Public Schools Head Start, evidence from the research precipitated modifications in the curriculum. Specifically, the program began to integrate more

math, science, and the arts into the curriculum.

Toward an evidence-based Head Start program

CONSISTENT WITH ITS PRACTICE for more than 35 years, Head Start continues to remain on the cutting-edge of research in early childhood development and education. Building on the large-scale national studies and the work of research partners, local programs are increasingly implementing their own research initiatives. These efforts are leading to the improved quality of Head Start programs across the country and to increased knowledge about the development of low-income children.

Photo by C. Dyer, Higher Horizons EHS-HS.

It is our hope that local programs planning to conduct research use the lessons learned from their colleagues and highlighted in this article. These lessons include strategies such as establishing a theory of change, obtaining staff and family buy-in, devising measurable research questions, employing a rigorous research design, selecting culturally appropriate and established measures, and developing high-quality data management and analyses strategies. Most important, these local programs provide evidence that research can be used to inform program improvement and outcome achievement. As we move toward a new phase in the history of early education and care, the continued integration of research and practice in Head Start can only bolster its position as the premier early childhood program for poor children in the nation. ■

REFERENCES

Achenbach, T. 1991. *Manual for the Child Behavior Checklist 4-18, 1991 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.

Beery, K. 1982. *Revised administration, scoring, and teaching manual for the Developmental Test of Visual Motor Integration*. Cleveland, OH: Modern Curriculum Press.

Denner, J., C. Cooper, E. Lopez, & N. Dunbar. 1999. Beyond "giving science away": How university-community partnerships inform youth programs, research, and policy. *SRCD Social Policy Report* 13 (1).

Gresham, F., & S. Elliott. 1990. *Social Skills Rating System*. Circle Pines, MN: American Guidance Service.

Harms, T., R. Clifford, & D. Cryer. 1998. *Early Childhood Environment Rating Scale. Revised*. New York: Teachers College Press.

Oden, S., L. Schweinhart, & D. Weikart. 2000. *Into adulthood: A study of the effects of Head Start*. Ypsilanti, MI: High/Scope Educational Research Foundation.

Schaefer, S., & J. Cohen. 2000. *Making investments in young children: What the research on early care and education tells us*. Issue Brief. Washington, DC: National Association of Child Advocates.

Woodcock, R., & M. Johnson. 1990. *Woodcock-Johnson Psychoeducational Battery. Revised*. Allen, TX: DLM Teaching Resources.

Zigler, E., & S. Styfco. 1998. Applying the findings of developmental psychology to improve early childhood intervention. In *Global prospects for education*, eds. S. Paris & H. Wellman, 345-366. Washington, DC: American Psychological Association.

Zigler, E., & S. Styfco. 2000. Pioneering steps (and fumbles) in developing a federal preschool intervention. *Topics in Early Childhood Special Education* 20 (2): 67-70.

Brenda Jones Harden *was a 2000–2001 Society for Research in Child Development Fellow, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. She currently serves as Assistant Professor at the University of Maryland Institute for Child Study. T: 301-405-2580; E: bj34@umail.umd.edu.* Danielle Rock *is a student at University of Maryland, College Park. T: 718-922-2006; E: darock2002@yahoo.com.*

BY MICHAEL LOPEZ

EVALUATING HEAD START EFFECTIVENESS
THE HEAD START IMPACT STUDY

THE CONGRESSIONALLY MANDATED NATIONAL HEAD START IMPACT STUDY has two primary goals. The first is to determine, on a national basis, how Head Start affects the school readiness of children participating in the program as compared to children not enrolled in Head Start. Does Head Start improve children's cognitive development, communication skills, fine and gross motor skills, and physical well-being? In addition, how does Head Start affect the lives of the families of children enrolled in the program?

The second goal of the study is to determine under which conditions Head Start works best and for which children. To meet this goal, the study will examine various factors that could affect the impact of the Head Start program. These factors will include

- differences among children attending Head Start;
- differences in children's home environments;
- the different types of Head Start programs available (home or center-based, quality indicators such as staff ratio, curriculum, part- versus full-day programs, one versus two years exposure); and
- the availability and quality of other child care and preschool programs in a particular area.

The National Head Start Impact Study is a longitudinal study that will involve approximately 5,000-6,000 three- and four-year-old children across an estimated 75 nationally representative grantee/delegate agencies in communities where there are more eligible children and families than can be served by the program. Participating children will be randomly assigned to either a treatment group (which receives Head Start services) or a comparison group (which does not receive Head Start services). Every effort will be made to minimize the burden on individual programs and to avoid significantly changing typical enrollment and recruitment procedures.

Photo by C. Dyer. Higher Horizons EHS-HS

Data collection is scheduled to begin in Fall 2002 and continue through 2006, following children through the Spring of their first grade year. It includes twice yearly in-person interviews with parents, in-person child assessments by independent assessors, annual surveys with care providers and teachers, direct observations of the quality of different care settings, and teacher ratings of children.

Data collection will include the following:

- individual child data in the areas related to school readiness, such as physical well-being and motor development, social and emotional development, approaches to learning, language usage and emerging literacy, cognition and general knowledge;
- information pertaining to parenting practices, family resources and risk factors, demographic and socioeconomic data, and family structure;
- information on the structure, process, and quality of Head Start, child care, and school settings through first grade; and
- community-level data relating to the availability and means of formal and informal family support services.

Currently, the project staff are engaged in multiple, preliminary activities to prepare for study implementation. A field test of various measures and procedures is being conducted with a small number of grantees. Several work groups, which include research experts and representatives from Head Start programs, are meeting to plan various aspects of the study. They are reviewing measurement selection, strategies to address community and service inputs beyond Head Start, and variations in recruitment/enrollment practices across different communities. Programs that have been selected to participate in the study have been contacted so that program and research staff can work jointly to streamline the study procedures to best match each program's recruitment and enrollment practices and timelines, and discuss other related issues.

Policymakers, administrators, and

Continued on page 55

BY LOUISA B. TARULLO, NICHOLAS ZILL, RUTH HUBBELL-MCKEY, GARY RESNICK, AND THE FACES RESEARCH TEAM

A NATIONAL PICTURE OF HEAD START
THE FACES STUDY

AS THE NATION'S PREMIER EARLY CHILDHOOD EDUCATION PROGRAM that serves more than 950,000 young children and their families each year, Head Start is leading the way in accountability for program outcomes and services. To enhance its accountability efforts, Head Start launched the Head Start Family and Child Experiences Survey (FACES) in 1997. FACES is an ongoing, national, longitudinal study of the cognitive, social, emotional, and physical development of Head Start children; the characteristics, well-being, and accomplishments of families; the observed quality of Head Start classrooms; and the characteristics and opinions of Head Start teachers and program staff.

A random sample of 3,200 children and families in 40 Head Start programs, who are representative of the national Head Start population, were studied at entry into the program in Fall 1997, assessed in the Spring at the completion of one or two years of Head Start, and followed up in the Spring of their kindergarten and first grade years. Because Head Start is committed to regular, ongoing accountability measurement and program improvement, a new, national cohort of FACES was launched in Fall 2000.

The FACES study provides answers to some of the most pressing questions concerning Head Start children, their families, and the programs themselves. Findings from the first FACES study show that although students begin the Head Start program at a great disadvantage compared to non-poor children, Head Start narrows the gaps between disadvantaged students and all other children and their families in numerous ways.

The observed quality of Head Start classrooms related to child outcomes: Better teacher-child language interaction was linked to better children's vocabulary.

Does Head Start Enhance Children's Development and School Readiness?

- Head Start narrows the gap between disadvantaged children and all children in vocabulary and writing skills during the program year.
- The children who score lowest on cognitive measures at the beginning of the Head Start year show greater gains than those who score higher at the beginning.
- Language-minority children show gains in school readiness skills and in their knowledge of English by the end of the Head Start year.
- Head Start graduates show gains in social skills, including improvements in peer interaction and complex play.
- Although children in the FACES 1997 study did not show growth in letter recognition or book and print concepts, children studied in 2000-2001 did progress during the program year.
- The small number of Head Start children with problem behaviors showed a decrease in hyperactivity, but not in other areas.
- Children leaving Head Start are "ready to learn." In kindergarten, Head Start graduates made substantial gains in word knowledge, letter recognition, math skills, and writing skills relative to national norms.

Does Head Start Strengthen Families as the Primary Nurturers of Their Children?

- Most parents were active in their Head Start program.
- Across all households, family activities with Head Start children increased slightly over the year.
- The majority of Head Start parents reported reading to their children at least three to five times a week.
- The majority of parents were very satisfied with the services their children received.
- Head Start parents reported important accomplishments during the Head Start year, such as slightly increased income and employment and decreased welfare dependence.
- Head Start parents cited Head Start staff as an important source of support in rearing their children.

Photo by D. Mentzer

Higher Horizons Early Head Start-Head Start

- Fathers appeared to play an important and positive role in the lives of children. When fathers were more supportive of the mothers in raising the children, children showed more positive social behavior and less problem behavior.

Does Head Start Provide Children with High Quality Child Development Services?

- Observed quality in Head Start classrooms continues to be consistently good in both the 1997 and 2000 studies.
- Class size and child:adult ratios exceeded the requirements of the Head Start Program Performance Standards and the National Association for the Education of Young Children (NAEYC) accreditation standards.
- Most Head Start teachers have good teaching qualifications, but not as good as teachers in public schools.
- In classrooms rated higher in learning environment materials, children spent more time in simple interactive play or pretend play. They spent less time in non-interactive play.
- The observed quality of Head Start classrooms was linked to child outcomes (e.g., the better the teacher-child language interaction, the higher children's vocabulary scores).

How Is Head Start Addressing These Issues ?

Evidence from the FACES study has highlighted areas of Head Start program quality and staff development that need improvement. The following initiatives have been designed to address these needs.

- Head Start has launched a Family Literacy Initiative to train programs to implement best practices in literacy development for children and families.
- Head Start is working to ensure that a majority of teachers obtain associate's or bachelor's degrees in early childhood education over the next few years. Funding has been earmarked for collaboration with higher education faculty and for teacher training and increased staff compensation.
- Head Start conducted a National Leadership Institute in December 2000, focusing on educational services in language development, literacy, mathematics, science, and social-emotional development.
- Head Start is requiring every local program to build an outcomes-based system to assess child development and learning and to use this information to individualize curriculum and teaching and to guide continuous program improvement.
- Head Start is launching a major initiative concentrated on improving literacy-focused classroom practice, to be implemented in Summer 2002.

The FACES study is conducted by Westat, Xtria, Inc. and the CDM Group Inc. (with Abt Associates Inc. in 1997-2000) and directed by the Child Outcomes Research and Evaluation team in the ACF Office of Planning, Research and Evaluation. The full report, Head Start FACES: Longitudinal Findings on Program Performance (3rd Progress Report), is available at <http://www.acf.hhs.gov/programs/core/ongoing_research/faces/faces_intro.html>. ■

Louisa B. Tarullo *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, ACF, DHHS. E: lbtarullo@acf.hhs.gov.* Nicholas Zill *is Vice-President of Child and Family Studies at Westat.* Ruth Hubbell-McKey *is Vice-President of Research and Program Services at Xtria, Inc.* Gary Resnick *is Senior Studies Director of Child and Family Studies at Westat.*

By Louisa B. Tarullo

ENHANCING SCHOOL READINESS
THE HEAD START QUALITY RESEARCH CONSORTIUM

The Head Start Quality Research Centers Consortium is another component of Head Start's mission to promote the school readiness of participant children. In 2001, a second cohort of Quality Research Centers (QRC) was funded for the next five years. Cooperative agreements were awarded to eight academic research teams who have partnerships with local Head Start programs. The projects are designed to improve child outcomes in the areas of literacy, social-emotional development, and other domains of school readiness through enhancements to curriculum, teacher training and mentoring, parent involvement, and assessment practices. Research teams will implement and evaluate their interventions with Head Start program partners in an initial site, then replicate the successful interventions in additional sites. A cross-site data collection effort using measures from the Head Start FACES Study (see Tarullo, Zill, Hubbell-McKey, and Resnick, pp. 38-39) has been launched in order to build on the body of evidence about the developmental processes and progress of Head

PROGRAM EXPERIENCES AS RESEARCH PARTNERS

by Gayle Cunningham, Stacy Dimino, and Carole Kuhns

IN LATE FEBRUARY 2002, Head Start Quality Research Centers (QRC) Consortium members gathered in Washington, D.C. for their fourth quarterly meeting. This group of eight Head Start-University partnerships was funded in March 2001 for a five-year period, but some programs had participated in the first cohort of QRCs (1995–2000). This particular gathering was special because all Head Start program partners were invited to attend and share their experiences. What was it like to have an intervention launched in their programs? What were their experiences as research sites in partnership with a local university or research institution and with an external research firm collecting cross-site data? Just as the partners had willingly opened their doors to the research process, they also warmly shared their experiences and recommendations for continued successful partnership.

1. Program Diversity

The research sites vary along a number of dimensions: size of Head Start program (12-165 classrooms); variety of curricula; some with NAEYC accreditation, some with program of excellence and program of achievement status; teaching staff with C.D.A., A.A., B.A. degrees; unionization; single purpose and community action agency offering multiple programs; numbers of school districts involved; urban-rural locations;, poor-affluent communities.

2. Experience with Research Studies

Five partners are experienced; three are new; four have staff funded by research grants.

3. Program Partner's Motivation for Collaboration

- Research is important for the survival of programs.
- Researchers are a resource for learning how to improve program quality.
- In-house program evaluation skills are gained that can be used even after the researchers are gone.
- Partners have access to new measures and tools.

4. Observations and Recommendations

- Good collaboration is about negotiating, engaging in dialogue, demonstrating give and take, and establishing trust.
- It takes time and is an ongoing task to establish trust, arrive at a comfort level, and develop an efficient research process.
- The implementation model needs to be individualized to match program needs.
- It is important to involve staff at every level from the

Start children across the country.

The Quality Research Centers, their research topics, and the principal investigators are as follows:

Using Assessment to Improve School Readiness and Head Start Program Quality Columbia University, New York: Sharon Lynn Kagan and Jeanne Brooks-Gunn

In partnership with programs in Stamford and Waterbury, Connecticut, the research team will implement an innovative observational assessment system for Head Start children, classrooms, and programs. The researchers will provide the supports and resources necessary to use the assessment data to improve classroom and program practice and child outcomes. A key feature is collaboration with the Connecticut Department of Education on school readiness outcomes.

A Systematic Approach to Fostering Language and Literacy Development Education Development Center, Massachusetts: David Dickinson

Collaborating with programs in Waltham and Boston, Massachusetts, the researchers will develop and assess a sys-

Photo courtesy of HSNRC.

beginning of the collaboration.

- More than one year of staff training is needed.
- Scheduling is important to reduce overlapping data collection in classrooms.
- Ongoing communication between program staff and parents helps increase parent involvement.
- Involving parents from the beginning of the study (Policy Council, Parent Orientation) is essential.
- Parent cooperation is increased by involving family workers.
- Scheduling parent interviews is time consuming.
- Parents need to be informed about the content of the parent interview.
- It is helpful when researchers have a background in early childhood practices and programs.

5. Cross-Site Data Collection

- Data collection staff (from Westat, Inc. and Xtria, Inc.) are adaptable, gracious, and supportive of program staff.
- Some sites need more bilingual data collection staff.

6. Overall Program Partner Experiences

- The partners' reactions to the research experience: positive, fortunate, interested, excited, elated, fun.
- Partners appreciate the opportunities to exchange and share information with other program partners and researchers.

Gayle Cunningham *is the Executive Director of the Jefferson County Committee for Economic Opportunity.*

Stacy Dimino *is Executive Director of Communities United.*

Carole Kuhns *is a Society for Research in Child Development Fellow, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: ckuhns@acf.hhs.gov.*

temic version of the Literacy Environment Enrichment Program, enabling programs to create their own self-improvement programs with a focus on language and literacy development. The intervention features intensive professional development activities involving both Quality Improvement Center staff and mentor teachers from the Head Start programs.

Achieving Head Start Effectiveness Through Intensive Curriculum Training
High/Scope Educational Research Foundation, Michigan: Lawrence Schweinhart

This intervention, based in programs in Oakland County, Michigan, will provide intensive training in the use of the evidence-based High/Scope curriculum framework. The evaluation of the intervention will include verification that the curriculum is being implemented appropriately in Head Start classrooms.

Supporting Children's Individualized Learning in Head Start
Quality Counts Inc., Georgia: Martha Abbott-Shim and Richard Lambert

Continuing their collaboration with programs in Jefferson County, Alabama, and Gainesville, Georgia, and adding new partners in Jackson and Brunswick, Georgia, the research team plans to implement a mentoring intervention. This intervention supports individualized learning experiences for children in Head Start that have been shown to promote classroom quality and children's school readiness.

Evidence-Based Emergent Literacy Approaches for Head Start
State University of New York at Stony Brook, New York: Janet Fischel

Through a partnership with a grantee in Suffolk County, Long Island, New York, this intervention will compare leading curricula used in Head Start programs that aim to enhance emergent literacy and language skills in terms of improved classroom practice and child outcomes.

Socioemotional Interventions to Enhance School Readiness University of North Carolina, North Carolina: Donna Bryant, Janis Kupersmidt, and Ellen Peisner-Feinberg

Working with programs in Person County and Roxboro, North Carolina, the research team will implement an evidence-based intervention program to reduce disruptive behavior and improve classroom functioning. Moving from a very intensive intervention provided by clinical consultants and tested via the Head Start Mental Health Research Consortium, this modification will develop and evaluate a self-sustaining, program-based intervention suitable for dissemination through the Training and Technical Assistance network.

Head Start Adaptation of "First Step to Success": Preparing Children for Social-Emotional Success at School University of Oregon, Oregon: Hill Walker, Edward Feil, Annemieke Golly, and Herbert Severson

In partnership with grantees in Lane County and other grantees in Oregon, the team proposes to adapt the "First Step to Success" early intervention kindergarten program to help preschoolers at risk for school problems become better prepared for the social and emotional challenges of school.

The Companion Curriculum: Connecting Head Start Parents and Teachers to Promote Early Learning and Development University of South Carolina, South Carolina: Julia Mendez, and Jean Ann Linney

Based on the premise that enhancing parent involvement is crucial to preparing children for school, this research team is working with programs in Columbia, South Carolina and surrounding counties to implement a home-based learning curriculum for parents and children, supplemented by parent-child learning corners within individual classrooms.

For more information, see <*http://www.acf.dhhs.gov/programs/core/ongoing_research/qrc*>. ■

Louisa B. Tarullo *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: lbtarullo@acf.hhs.gov.*

BY RACHEL CHAZAN-COHEN, HELEN H. RAIKES, ESTHER KRESH, JOHN M. LOVE, ELLEN ELIASON KISKER, JUDITH JERALD, AND THE EARLY HEAD START RESEARCH CONSORTIUM

EARLY HEAD START FINDINGS
SIGNIFICANT BENEFITS FOR CHILDREN AND FAMILIES

EARLY HEAD START (EHS) IS A TWO-GENERATION PROGRAM designed to provide high-quality child and family development services to low-income pregnant women and families with infants and toddlers. The program also focuses on staff development and has a commitment to community partnerships. In 1995, EHS began serving children and families in 68 programs nationwide. By 2001, EHS is more than 650 programs serving some 55,000 children and families.

EHS has benefited from a rigorous national evaluation. At the same time that ACYF funded the very first EHS programs, they also began the national evaluation. The EHS Research and Evaluation Project was conducted by the EHS Research Consortium[1] led by Mathematica Policy Research, Inc. and the Center for Children and Families at Columbia University. Seventeen EHS programs participated in the study, which consisted of five components: an impact study, an implementation study, local research, special policy studies, and continuous program improvement.

Photo courtesy of HSNRC.

Babies enjoy seeing their reflections

Impact of Early Head Start on Children and Families

THE IMPACT STUDY involved about 3,000 children and their families in the 17 sites. Half were randomly chosen to receive EHS services, while the other half were randomly assigned to a control group that did not receive EHS, although they were free to avail themselves of other services in the community. Families and children were assessed when the children were 14, 24, and 36 months old. Families were also interviewed about their service use at 6, 15, and 26 months after enrollment and at the time they exited the program.

Early findings show that EHS has favorable impacts across a wide range of child and parent outcomes. Although these impacts are generally modest in size, the pattern of positive findings across a wide range of key domains important for children's well-being and future development is promising.

Selected key impacts on children and families[2]:

- EHS children performed significantly better than their randomly assigned control group peers on cognitive, language, and social-emotional development indicators.
- EHS parents demonstrated more supportive and less punitive parenting, provided more stimulating home environments, and read to their children more.
- EHS parents were more likely than control parents to participate in education and job training. Early in their program history, they reported lower levels of parenting stress and family conflict. Families enrolled in EHS were also less likely to experience a subsequent birth during the two years after enrollment.
- Overall impacts varied by programs' achievement of "full implementation," as measured in the implementation study. Programs that fully implemented key aspects of the Head Start Program Performance Standards had larger impacts on families' use of services, children's development, parenting, and family development than programs that never implemented them completely.
- Those programs that adopted a mixed approach to providing services (both center-based and home-based services) achieved the strongest and broadest pattern of impacts for children and families.
- EHS had some impacts on most types of families with diverse circumstances, although patterns of impacts varied.

Early Implementation of EHS Programs

IMPLEMENTATION DATA were collected through three rounds of site visits, surveys of program staff, and observations in EHS centers. The study tells the story of the 17 research programs' development through their early years.

Selected key findings from the

implementation study[2]:

- **Evolving Program Approaches:** In the early years of program existence, these 17 programs chose various models of service delivery in order to meet the unique needs of children and families in their community. There was a notable increase in "mixed approach" programs, those that provide a mixture of both home-based and center-based services.
- **Progress in Overall Implementation of Key Head Start Performance Standards:** One-third (6) of the programs were early implementers, becoming fully implemented within one year of serving families. Another one-third (6) of the programs became fully implemented in the third year of serving families. The remaining 5 programs were incomplete implementers. They did not achieve ratings of "fully implemented" during the evaluation period, even though they all made strides in particular program areas and, in fact, showed a number of strengths.
- **Quality of Child Development Services:** Quality of both home- and center-based child development services was generally good and improved over time. ■

Rachel Chazan-Cohen *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: rccohen@acf.hhs.gov.* Helen H. Raikes *is a Society for Research in Child Development Visiting Scholar, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS.* Esther Kresh *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS.* John M. Love *is a Senior Fellow at Mathematica Policy Research, Inc.* Ellen Eliason Kisker *is a Senior Researcher at Mathematica Policy Research, Inc.* Judith Jerald *is the Coordinator of Early Head Start in the Head Start Bureau. T: 202-205-8074; E: jjerald@acf.hhs.gov.*

1. The findings reported here are based on research conducted as part of the national Early Head Start Research and Evaluation Project funded by the Administration on Children, Youth and Families (ACYF), U.S. Department of Health and Human Services under contract 105-95-1936 to Mathematica Policy Research, Princeton, NJ, and Columbia University's Center for Children and Families, Teachers College, in conjunction with the Early Head Start Research Consortium. The consortium consists of representatives from 17 programs participating in the evaluation, 15 local research teams, the evaluation contractors, and ACYF/ACF. Research institutions in the consortium (and principal researchers) include ACYF/ACF (Rachel Chazan-Cohen, Esther Kresh, Helen Raikes, Louisa Tarullo, and Judith Jerald); University of Arkansas (Robert Bradley, Mark Swanson, and Leanne Whiteside-Mansell); University of California, Los Angeles (Carollee Howes and Claire Hamilton); Catholic University of America (Shavaun Wall); University of Colorado Health Sciences Center (Robert Emde, Jon Korfmacher, JoAnn Robinson, and Paul Spicer); Columbia University (Lisa Berlin, Jeanne Brooks-Gunn, and Alison Fuligni); Harvard University (Catherine Ayoub, Barbara Alexander Pan, and Catherine Snow); Iowa State University (Carla Peterson); University of Kansas (Jane Atwater, Judith Carta, and Jean Ann Summers); Mathematica Policy Research (Kimberly Boller, Ellen Eliason Kisker, John M. Love, Diane Paulsell, Christine Ross, Peter Schochet, and Welmoet van Kammen); Medical University of South Carolina (Richard Faldowski); Michigan State University (Hiram Fitzgerald, Tom Reischl, and Rachel Schiffman);University of Missouri—Columbia (Mark Fine, Jean Ispa, and Kathy Thornburg); New York University (Mark Spellmann and Catherine Tamis LeMonda); Utah State University (Lisa Boyce and Lori Roggman); University of Washington School of Education (Eduardo Armijo and Joseph Stowitschek); and University of Washington School of Nursing (Kathryn Barnard and Susan Spieker).

2. The reports can be found at <*http://www.mathematica-mpr.com/3rdLevel/ehstoc.htm*> or <*http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_intro.html*>.

Copies can be ordered at <*http://www.headstartinfo.org/*> or 703-683-2878.

STRATEGIES TO PROMOTE LANGUAGE AND SOCIAL DEVELOPMENT

***The Head Start Child Outcomes Framework* (2000) specifies learning outcomes in 8 Domains of learning and development, including language, literacy, and social and emotional Domains. It also includes Congressionally mandated Domain Elements and Indicators in language, literacy, and numeracy on which programs must collect and analyze data. The *Framework* guides Head Start programs in their ongoing assessment of the progress and accomplishments of children and in their continuous program improvement. Research-based teaching strategies associated with the learning outcomes are described in *The Head Start Leaders Guide to Positive Child Outcomes* (in press 2002). These tips for practioners are excerpted from the *Guide*.**

ADULTS CAN PROMOTE LISTENING AND UNDERSTANDING, SPEAKING AND COMMUNICATING:

- Model good listening such as maintaining eye contact and expressing interest in the speaker.
- Use children's interests to identify new words, such as locomotive, caboose, pick-up truck.
- Read to children and talk about the book before reading it, asking children to predict from the title or cover what the story will be about or what might happen next.
- Participate in play to get it going if children have difficulty, or to extend it to include more language interaction. For instance, the teacher may enter the restaurant and pretend to be a customer, "Could I see a menu please. I'd like to order dinner."
- Get in the habit of giving children plenty of time—five seconds or so—to respond to a question or conversational comment. The simple act of providing "wait time" increases children's verbal responses, especially for children who tend to speak less often.
- Plan in-depth projects with children to investigate questions or topics of interest that expand vocabulary and provide opportunities for extended discussion and different points of view.

(Refer to the Guide, *Domain 1: Language Development)*

ADULTS CAN PROMOTE SOCIAL DEVELOPMENT BY USING PEERS TO INCREASE A CHILD'S PARTICIPATION:

- If a child doesn't know how to select an activity or game from the computer menu, pair the child with another child who is familiar with operating the computer. Let the peer show the other how to select an activity from the computer menu.
- If a child is watching two children play and seems to want to join them, ask the two children to invite the other to join them.
- If a child doesn't know when and where to line up during the transition to the playground, pair the child with another child who knows the routine and follows directions. Ask the children to find their partner and hold their partner's hand when lining up.
- If a child is learning to use English words or sign language to request food items at snack or mealtime, have another child hold the requested food (such as a plate of crackers). The child will need to request the crackers from the friend instead of always making requests of adults.
- If a child is a reluctant talker during group activities, give the child a turn to talk after another child who is particularly talkative. This gives the reluctant child ideas about what to say.

(Refer to the Guide, *Supporting the Individual Child: Adaptations for Individual Differences and Children with Special Needs, and Domain 6: Social & Emotional Development.)*

ESTRATEGIAS QUE FOMENTAN EL DESARROLLO LINGÜÍSTICO Y SOCIAL

***El Marco sobre Resultados del Niño en Head Start* (2000) detalla los resultados del aprendizaje en 8 Dominios de aprendizaje y desarrollo, incluidos los Dominios de lenguaje, lecto-escritura, y aquellos en el área social y emocional. También incluye los Elementos e Indicadores en lenguaje, lecto-escritura y conceptos numéricos bajo mandato del Congreso, y en base a los cuales los programas deben recopilar y analizar datos. Este *Marco* sirve como guía para los programas de Head Start para su evaluación continua del progreso y logros de los niños, y para el mejoramiento continuo de su programa. En la *Guía para Líderes de Head Start sobre Resultados Positivos del Niño* (que se publicará en 2002) se describen estrategias de enseñanza fundamentadas en la investigación y que se relacionan con los resultados del aprendizaje. A continuación se plantean algunos consejos extraídos de la *Guía*, y dirigidos a los profesionales:**

LOS ADULTOS PUEDEN FOMENTAR EL ESCUCHAR Y COMPRENDER, EL HABLAR Y COMUNICARSE:

- Modele buenos hábitos para escuchar y prestar atención, tales como mantener contacto con la vista y expresar interés en la persona que habla.
- Utilice aquellas áreas de interés para los niños para identificar palabras nuevas, tales como locomotora, furgón, camioneta.
- Léales a los niños y converse sobre el libro antes de comenzar a leer. Pídales que a partir del título o de la cubierta del libro predigan de qué se va a tratar la historia, o qué va a pasar después.
- Participe en el juego para incentivarlo y darle vida si los niños tienen dificultad en hacerlo, o amplíelo para poder incluir una mayor interacción verbal. Por ejemplo, el maestro puede entrar al restaurante y pretender ser un cliente, "¿Podría ver un menú por favor? Me gustaría pedir algo de comer".
- Adquiera el hábito de darle tiempo a los niños (unos cinco segundos), para que respondan a alguna pregunta o hagan un comentario de la conversación. El simple hecho de darles un "tiempo de espera" aumenta las respuestas verbales de los niños, particularmente de aquellos que tienden a hablar menos.
- Planifique los proyectos a fondo con los niños para hacer preguntas o averiguar temas de interés que amplíen su vocabulario, y les dé oportunidades para conversar más extensamente y para entregar distintos puntos de vista.

(Consulte la Guía *el Dominio 1: Desarrollo Lingüístico)*

LOS ADULTOS PUEDEN FOMENTAR EL DESARROLLO SOCIAL, UTILIZANDO A SUS COMPAÑEROS DE TRABAJO PARA AUMENTAR LA PARTICIPACIÓN DE UN NIÑO:

- Si un niño no sabe cómo seleccionar una actividad o juego en el menú de la computadora, siéntelo con otro niño que esté familiarizado con ella. Deje que el compañero le muestre al niño cómo seleccionar la actividad que desea en el menú de la computadora.
- Si una niña está observando cómo juegan otras dos niñas y parece estar interesada en jugar con ellas, pídale a las niñas que la inviten a jugar.
- Si un niño no sabe cuándo y dónde ponerse en fila mientras salen al patio de juego, ubíquelo junto a otro niño que conozca la rutina y siga instrucciones. Dígales a los niños que ubiquen a su compañero(a) y se tomen de la mano cuando tengan que ponerse en la fila.

Si un niño está aprendiendo a usar palabras en inglés o lenguaje por signos para pedir alimentos durante la merienda o a la hora de comer, pídale a otro niño que retenga la comida que el niño ha pedido (por ejemplo: un plato con galletas). El niño tendrá que pedirle las galletas a su amigo en vez de pedírselas a los adultos.

Si un niño no habla mucho durante las actividades en grupo, déle la oportunidad para que hable después de algún niño que sea particularmente bueno para hablar. Esto le dará ideas al niño más callado sobre qué decir.

(*Consulte la* Guía*: Adaptaciones para las diferencias individuales: niños con necesidades especiales y niños superdotados y el Dominio 6: Desarrollo social y emocional).*

BY MARY BRUCE WEBB AND THE TRANSITION EVALUATION CONSORTIUM

IS THERE A "FADE-OUT" EFFECT?

RESULTS FROM THE NATIONAL HEAD START/PUBLIC SCHOOLS EARLY CHILDHOOD TRANSITION DEMONSTRATION EVALUATION

IS THE "FADE-OUT" EFFECT INEVITABLE? Research following a large sample of Head Start children through the first years of elementary school strongly suggests that Head Start children can continue to make rapid academic progress once they enter school and ultimately can achieve at national norms in reading and math.

The National Head Start/Public Schools Early Childhood Transition Demonstration Program was conducted in 31 sites. The purpose was to provide comprehensive, Head Start-like services to children as they moved through the early grades of elementary schools. Schools participating in the study were assigned to a Transition Demonstration group, which received additional supports and staff through project funds, or to a Comparison group, which did not receive extra funds. A total of 7,515 former Head Start children and families were enrolled in the Transition Demonstration Program in 1992–93 and 1993–94 when they entered kindergarten. The children and families were interviewed and assessed each year until the end of third grade. Thousands of other children and families, however, benefited from the Transition Demonstration Program because supports and educational enhancements were offered to all children and families in the participating schools.

Although each site implemented programs that were tailored to local needs and conditions, all were required to implement central components related to family support, parent involvement, health and nutrition, and academic enhancements to promote continuity in children's educational experiences. Each site also established Governing Boards comprising at least 51% former Head Start parents. They were also required to hire Family Service Coordinators to assist families and promote parent involvement. Other key components included: promoting the inclusion of children with disabilities in regular classrooms; addressing cultural and linguistic diversity; and developing individualized transition plans for each child.

Photo courtesy of Michigan MHS.

Evaluation Design

AN EVALUATION of the Early Childhood Transition Demonstration Program was conducted to provide information about its implementation and its impact on children, families, schools, and communities. The results are informative.

From the start, local sites varied tremendously in terms of the willingness of their schools and communities to enact major changes (that is, providing Head Start-like services). Their previous experience in conducting large-scale, multi-prong, school-based partnership programs also varied. Not surprisingly, the majority of local programs showed a combination of strengths and weaknesses. Their implementation of different components also fluctuated over the years.

An interesting and unanticipated feature of the most successful sites was that they tended to have the most competition from local Comparison schools. That is, the Comparison schools, which usually were in the same district, often launched programs similar to the Transition Demonstration Program. These same sites also demonstrated widespread local commitment to improving the school adjustment of former Head Start and other low-income children, as well as increasing parent involvement and improving family well-being.

Key Findings

THE EVALUATION REVEALED few statistically significant differences for outcomes between the Demonstration and Comparison groups. There are several possible explanations. First, the Demonstration and Comparison conditions in many sites were very similar,

An interesting and unanticipated feature of the most successful Transition sites was that they tended to have the most competition from local comparison schools.

with Comparison schools often finding additional funding to implement programs similar to those in Demonstration schools. Second, the quality of program implementation was not uniformly high across sites.

Although the evaluation did not reveal significant differences between the two groups, it provided a unique opportunity to examine the performance of a large, diverse, geographically dispersed group of Head Start children and families over the first four years of school. The children in both conditions had very good outcomes, perhaps reflecting the commitment of the participating school systems to promote the achievement of all the children in their care.

Combining the data from the Demonstration and Comparison groups, important findings emerge.

The former Head Start children showed good academic progress in reading and math, with the largest gains made in the first two years. Although they entered kindergarten substantially below national averages on the Woodcock-Johnson Tests of Achievement, they made rapid progress during the first years of school. Their performance was at the national average by the end of the second and third grades.

In terms of receptive language skills or vocabulary knowledge (as measured by the Peabody Picture Vocabulary Test), the children's gains continued but were less dramatic. Their scores remained lower relative to national norms than their scores in reading and math did.

Teachers' ratings of children's academic abilities corresponded moderately well with their standardized test scores on the individually administered assessments. However, teacher ratings of overall academic achievement were somewhat lower than children's tested scores in reading and math.

Parents consistently rated their children's school adjustment as very positive from the Spring of kindergarten through the end of third grade.

The children overwhelmingly reported having positive early school experiences. The vast majority liked school, valued doing well, tried hard, reported getting along well with teachers and peers, and said they learned a lot from their teachers.

Beginning at entry into kindergarten and continuing through the first four years in school, the former Head Start children showed positive social and behavioral adjustment. They performed at national norms on the Social Skills Rating Scale, based on ratings by both teachers and parents.

Income and self-sufficiency increased over time among the former Head Start families.

More than 85% of the families reported being covered by health insurance when the children entered kindergarten. Families generally were satisfied with the health care they received.

Mental health needs are an important consideration for Head Start families. About 40% of caregivers reported depressive symptoms as the children entered kindergarten. Although some of these caregivers may have been reporting transient symptoms, about 19% of caregivers still reported continuing, chronic depressive symptoms four years later when the study ended. ■

Mary Bruce Webb *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: mbwebb@acf.hhs.gov.*

By Esther Kresh

BRINGING THE BEST MINDS TO THE TABLE
HEAD START–UNIVERSITY PARTNERSHIPS

A central goal of the Head Start research mission is to expand the cadre of research scholars who conduct state of the art, practitioner-relevant research with Head Start programs across the country. In keeping with this goal, the Head Start Bureau initiated the Head Start-University Research Partnerships. This initiative provides financial support to university and research institute faculty who form multi-year partnerships with Head Start programs in their communities. Applications for the most recent discretionary research grants announcement, due on May 3, 2002, are targeted in two areas: 1) developing and testing models that use child outcomes to support continuous program improvement in local Head Start programs, and 2) supporting the development of infant-toddler mental health in Early Head Start programs.

The objectives of these awards are to improve the quality and effectiveness of Head Start services through the acquisition of new knowledge and to test the application of theory-driven, evidence-based interventions in Head Start settings. The five most recent Partnership grants reflect these objectives.

Photo courtesy of HSNRC.

Nutrition Education Aimed at Toddlers (NEAT)

Michigan State University: Mildred Omar

This project is aimed at promoting toddler development and self-regulation by improving toddler feeding practices. Specifically, the NEAT project will include an intervention consisting of two components: 1) in-class structured lessons on child development, feeding, food, nutrition, mealtime, and parenting practices; and 2) in-home structured reinforcement of these lessons. The evaluation of the program will explore whether NEAT: 1) improves parents' feeding attitudes, knowledge, confidence, and behavior; 2) positively influences toddler food consumption; and 3) positively influences toddler growth and health.

Building Early Head Start Relationships: What Benefits Children and Parents?

Purdue University: James Elicker

This project is designed to evaluate the effectiveness of Early Head Start services, focusing on interpersonal relationships that develop between staff and families within the program. Specifically, this project will: 1) assess and describe the relationships that develop between Early Head Start staff, children, and parents; 2) examine staff-family relationships in several Early Head Start service delivery models and in relation to variations in staff and family characteristics; and 3) determine if higher quality staff-family relationships are associated with better outcomes for Early Head Start children and parents.

A Multi-Site, Multi-Method Partnership for Improving Florida Head Start Children's School Readiness

University of Miami: Daryl Greenfield

The purpose of this project is to develop direct child assessments of children's "approaches to learning." Researchers will attempt to create an empirically validated conceptualization of children's "approaches to learning" and determine the role of these approaches in promoting school readiness. A statewide data system will be established so that data can be compared across domain, informant, and center. Based on these data, a classroom-based intervention to promote enhanced approaches to learning will be implemented that will be evaluated using a randomized control design.

Photo by D. Mentzer. Higher Horizons EHS-HS.

Teaching Attachment-Based Interventions for Head Start Dyads

University of Virginia: Robert Marvin

This project extends earlier clinical and empirical work on attachment by developing an extensive manual for a brief, small group intervention protocol—the Circle of Security (COS). The COS is a 20-week intervention focusing on strengthening child-parent attachment security. In addition, this project will empirically test whether the COS protocol can be successfully taught to and implemented by supervised, community-based mental health service providers. Other products of the project include a set of suggested procedures for creating similar mental health-Head Start partnerships and a dissemination plan for the manual.

Building Social Communication Skills During Peer Interactions

Vanderbilt University: Ann Kaiser

The goals of this study are to: 1) develop and test a multi-component intervention to teach peer-directed, pragmatic communication skills to children at risk for language and behavior problems; 2) determine the effects of this intervention on the development of language, pragmatics, social behavior, and play in children with identified language and behavior problems; and 3) determine the effects of this intervention on children who represent a range of early language and social skills. The intervention will include the following components: 1) the use of story books to provide specific models of language, pragmatics, and conversation to be used during free play; 2) corresponding thematic materials to support peer interactions and provide an opportunity to role play and practice specific pragmatic skills; and 3) an advanced Play/Organizer/Play/ Review sequence to structure children's opportunities to acquire, practice, and integrate their skills for talking with peers.

For further information on the Head Start-University Research Partnerships program, see <*http://www.acf.hhs.gov/programs/core/ongoing_research/funding/funding.html*>. ■

Esther Kresh *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: ekresh@acf.hhs.gov.*

By Rhonda C. Boyd and Michael Lopez

USE OF RESEARCH TO ADVANCE MENTAL HEALTH IN HEAD START

The full range of mental health issues experienced by low-income children and their families has not been widely researched. As a result, there are huge gaps in the knowledge base that only high quality research studies can fulfill. Head Start provides an ideal national laboratory for addressing and studying the mental health of low-income children and families (Yoshikawa & Knitzer 1997). Understanding the complex set of mental health issues and needs of the Head Start community will have a far-reaching impact on program practice as well as on state and national policy.

Photo by D. Mentzer

Higher Horizons EHS-HS

Questions about mental health that research can answer

Critical research topics have been identified from recent reports and journal articles. Addressing these topics will deepen our understanding of the mental health needs of young children and their families and improve our services to them. Among the critical questions that research should address are—

- How do the social and emotional well-being of young children and the related risks develop over time?
- What are the prevalence rates of mental health problems within the population of low-income young children?
- What are the types, availability, and accessibility of mental health services for Head Start children and their caregivers?
- How do different types of mental health interventions affect the emotional and behavior problems of Head Start children and families? What types of interventions are beneficial for children and families with various types of mental health problems?
- What measures can best assess young children's mood and behavior in a developmentally and culturally appropriate manner?

Recent Federal and national efforts for young children's mental health research

Responding to the urgent need to understand children's social and emotional development and to develop the appropriate assessment and intervention strategies, several Federal and national initiatives focus on research and mental health. The initiatives are broad and represent diverse strategies.

1. In September 2000, the Surgeon General Dr. David Satcher convened the conference, Children's Mental Health: Developing a National Agenda, to address the mental health needs of our nation's children. Research had a major voice in determining some of the conference goals: Specifically, the goals related to the development, dissemination, and implementation of science-based mental health services (both prevention and treatment). Head Start centers are ideal settings for developing and trying out new screening instruments and innovative interventions and for adapting interventions and models to a real-world setting.
2. A collaboration among federal agencies and private foundations—the Child Mental Health and Agencies Network (FAN)—issued a monograph, *A Good Beginning: Sending America's Children to School with the Social and Emotional Competence They Need to Succeed* (Peth-Pierce 2000). This document reviewed the existing research and Federal policies related to the social and emotional competence of children's school readiness. Specifically, it presented research about the social and emotional risks and protective factors that predict early school success or problems. It also summarized selected Federal policies that may improve children's chances of success in their transition to school. Head Start and Early Head Start were cited for their role in improving the risk status of low-income children. Nevertheless, the monograph concluded that there are

Photo by C.Dyer. Higher Horizons EHS-HS.

gaps between the Federal policies and practices and the research knowledge. The policies and practices need to become more aligned with research findings. Thus, Head Start can greatly benefit from new research to improve its delivery of mental health services.

3. The National Research Council and the Institute of Medicine, with the support of numerous public and private agencies, issued a report, *From Neurons to Neighborhoods* (2000). Child development research from birth to kindergarten entry was thoroughly reviewed. The report recognized the role of research in preventing and treating conditions from infancy to the early years of life. It recommended that researchers collaborate to understand critical issues, such as pathways that lead some children to engage in risky behavior and others to exhibit more competent behavior, as well as to translate research findings into interventions in different types of settings. Head Start could be used as a national laboratory to better understand important pathways of social and emotional development and to test new, evidence-based interventions.
4. A collaboration between the Administration on Children, Youth and Families and the National Institute of Mental Health has led to the creation of the Head Start Mental Health Research Consortium. The Consortium consists of five sites around the country that conduct research on mental health issues, assessment, screening, intervention, and prevention in Head Start centers (see Kuhns and Chazan-Cohen, pp. 8-9). Collaborative mental health research initiatives, such as this Consortium, can be extremely valuable to Head Start programs because additional mental health resources and support are provided. Furthermore, Head Start is put on the frontier of new, exciting knowledge development that has the potential of enhancing the mental health of young children.

Taken together, these various Federal initiatives nicely illustrate the pressing need for new, high quality developmental and mental health research in early childhood settings such as Head Start. These initiatives also suggest ways that research can proceed. Head Start should openly embrace emerging research knowledge and support new studies within its centers. Not only will Head Start children, families, and programs benefit directly from research, but the policy implications can positively impact all low-income children and families across the country.

For more information on mental health issues, see the *Child Mental Health Head Start Bulletin*, Issue 73. ■

REFERENCES

Peth-Pierce, R. 2000. *A Good Beginning: Sending America's Children to School with the Social and Emotional Competence They Need to Succeed*. Bethesda, MD: Child Mental Health Foundations and Agencies Network (FAN).

Shonkoff, J. P., & D. A. Phillips, eds. 2000. *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.

Yoshikawa, H., & J. Knitzer. 1997. *Lessons from the field*. New York: National Center for Children in Poverty.

Rhonda C. Boyd *was a 2000-2001 Society for Research in Child Development Fellow, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. She currently serves as Instructor at the University of Pennsylvania, Children's Hospital of Philadelphia. T: 215-590-3945. E: rboyd@mail.med.upenn.edu.* Michael Lopez *is Lead Senior Social Science Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: milopez@acf.hhs.gov.*

BY BRENDA JONES HARDEN AND MICHAEL LOPEZ

GROWING A NEW GENERATION
HEAD START GRADUATE STUDENT RESEARCH GRANTS

AS PART OF ITS PROFESSIONAL DEVELOPMENT and research capacity-building efforts, the Head Start Bureau provides financial support to doctoral-level students to implement research projects in local Head Start programs. Students who are selected are working toward professional careers in research. They are awarded the grants based on external evaluations of their proposal's research design and evidence of a partnership with a designated Head Start program.

Each student must be mentored by a faculty member who has a history of empirical work with issues, populations, or interventions relevant to Head Start. A strong emphasis is placed on supporting the mentor-student relationships that will help foster the intellectual and professional development of the next generation of researchers. For it is these researchers who will advance the scientific knowledge base needed to improve services for Head Start children and families. Grants are awarded on a one- or two-year basis. They range between $10,000 to $20,000 per year. Award recipients attend one or two annual meetings in which their research projects are discussed with their peers, their mentors, and Federal research staff.

The content areas of the research projects can be wide-ranging but should reflect Head Start priorities (for example, topic areas in the latest announcement are school readiness, children's mental health, strengthening fatherhood, and healthy marriages). The topics and recipients of the most recent set of grantees (Fiscal Year 2001) are:

"Assessment of Curriculum Practices in Head Start"
Graduate Student Scholar: **Stacey Storch**
Faculty Mentor: **Janet Fischel**
Institution: **State University of New York at Stony Brook**

"The Relationship between Contextually Relevant Assessment of Emotional and Behavioral Adjustment in Head Start and Children's Social Adjustment and Academic Achievement in Primary Grades"
Graduate Student Scholar: **Rebecca Bulotsky**
Faculty Mentor: **John Fantuzzo**
Institution: **University of Pennsylvania**

"Parents' Emotional Awareness and Childrearing Practices: Implications for Low-Income Children's Social-Emotional Competence"
Graduate Student Scholar: **Rebecca Cortes**
Faculty Mentor: **Mark Greenberg**
Institution: **Pennsylvania State University**

"Describing and Defining Dads: A Father's Role in Promoting Head Start Children's School Readiness"
Graduate Student Scholar: **Jason Downer**
Faculty Mentor: **Julia Mendez**
Institution: **University of South Carolina**

"Mothers' Self-Efficacy as a Protective Factor for Secure Attachments for Low-Income Children"
Graduate Student Scholar: **Hilary Abigail Raikes**
Faculty Mentor: **Ross Thompson**
Institution: **University of Nebraska-Lincoln**

"Children's Aggressive Behavior in a Head Start Sample: Its Relation to Maternal Factors and Children's Attachment Representations"
Graduate Student Scholar: **Ann Stacks**
Faculty Mentor: **Holly Brophy-Herb**
Institution: **Michigan State University**

For further information on the Head Start Graduate Student Research Grants program, contact Michael Lopez at milopez@acf.hhs.gov or see <http://www.acf.hhs.gov/programs/core/ongoing_research/hs/grad/intro.html>.

Brenda Jones Harden *was a 2000–2001 Society for Research in Child Development Fellow, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. She currently serves as Assistant Professor at the University of Maryland Institute for Child Study. T: 301-405-2580. E: bj34@umail.umd.edu.* **Michael Lopez** *is Lead Senior Social Science Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: milopez@acf.dhhs.gov*

RESEARCH AND EVALUATION DIVISION OF THE NATIONAL HEAD START ASSOCIATION (NHSA)

by Greg Powell and Komal Vohra

THE PRIMARY RESPONSIBILITY of the Research and Evaluation Division is to address the needs of the Head Start community in the area of research and evaluation. The R and E Division serves as a liaison between Head Start and other organizations involved in research related to Head Start and early childhood development. It maintains files on pertinent research in the area of child and family development. Findings are shared with the Head Start community through sessions at NSHA Conferences, speaking engagements, and publications, including *NHSA Dialog: A Research-to-Practice Journal for the Early Intervention Field*. Additionally, the R and E Division uses data and research on Head Start to formulate position papers for the association and briefs to use in advocacy efforts. The primary goal and objectives of the R and E Division, as set by the NHSA Board, are as follows:

GOAL: Provide leadership and advocacy for the development of applied research that will provide accurate information about the Head Start Program and support the delivery of high quality services to the Head Start community.

Objectives:

- To produce an annual plan to educate the Head Start community by broadly disseminating latest research and other findings on successful early child development strategies.
- To develop and implement a plan to assist state associations in identifying a pool of qualified consultants to assist local programs and associations in using research in their planning, implementation, and staff development.
- To produce and disseminate a report on identifying successful models in Head Start grantee relationships and governance models.
- To increase its linkages with at least five additional organizations and institutions in the research community.
- To conduct a yearly assessment to determine the research needs of the Head Start community.
- To prepare and disseminate an annual research agenda to promote topics identified as important to the successful operations of Head Start programs.

In addition, the R and E Division has embarked on efforts

- To track research on Head Start and keep NHSA members informed of results.
- To develop a process for identifying problems, concerns, and areas of interest to local programs.
- To conduct and/or encourage research in specified areas to obtain detail needed for formulating policy recommendations.
- To develop and disseminate position statements based on research findings.
- To provide local program staff and members with appropriate training and technical assistance on research findings, implications, and utilization.

The *NHSA Dialog* includes peer-reviewed articles, readers' questions and professionals' responses, and Research Track proceedings. Recent issues focus on topics relevant to the Head Start community such as school readiness (January 2001) and community-university research partnerships (June 2002).

Gregg Powell *is Director of the Research and Evaluation Division at the National Head Start Association. T: 703-739-7558; E: cgpowell@nhsa.org.*

Komal Vohra *is on the staff of the NHSA Research and Evaluation Division.*

Continued from page 9, CORE

these fathers again prior to their children's entry into kindergarten. For more information, see <*http://www.acf.dhhs.gov/programs/core/ongoing_research/father/father_intro.*> ■

Carole Kuhns *is a Society for Research in Child Development Fellow, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: ckuhns@acf.hhs.gov.*

Rachel Chazan-Cohen *is a Senior Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: rccohen@acf.hhs.gov.*

RESOURCES

WEBLIOGRAPHY

The following Web sites about research and evaluation are recommended as further resources for teachers, parents, and administrators

http://www.eval.org/EvaluationLinks/links.htm

THE AMERICAN EVALUATION ASSOCIATION offers a comprehensive list of links to evaluation resources.

http://ericae.net/ftlib.htm

ERIC/AE FULL TEXT INTERNET LIBRARY provides links to some of the best full-text books, reports, journal articles, newsletter articles and papers on the Internet that address educational measurement, evaluation, and learning theory. The materials focus primarily on education.

http://www.innonet.org/resources/overview.cfm

INNONET (INNOVATION NETWORK) is a nonprofit organization that supports participatory evaluation and offers an online resource center with free information on evaluation, including definitions and tools. It provides links to logic models and data collection.

ARTICLES/NEWSLETTERS

"RESEARCH IN REVIEW"

A regular column in *Young Children,* the bimonthly publication of the National Association for the Education of Young Children. The article is designed to familiarize early childhood practitioners with research and implications for practice.

Order from NAEYC, T: 800-424-2460.

CHILD POVERTY NEWS & ISSUES

The newsletter of the National Center for Children in Poverty. It contains articles about issues relevant to the Center's goal of identifying and promoting strategies that prevent child poverty in the United States and that improve the lives of low-income children and their families, particularly among children under age six. Published seasonally.

Order from NCCP, T:212-304-7561. Available online: http://cpmcnet.columbia.edu/dept/nccp/main3.html

THE EVALUATION EXCHANGE

Published by the Harvard Family Research Project. Designed as an ongoing discussion among evaluators, program practitioners, funders, and policymakers, the newsletter highlights innovative methods and approaches to evaluation, emerging trends in evaluation practice, and practical applications of evaluation theory. Available free of charge, 3-4 times per year.

Order from HFRP, T: 617-495-9108. Available online: http://www.gse.harvard.edu/hfrp/eval.html

HANDBOOKS

W.K. KELLOGG FOUNDATION EVALUATION HANDBOOK

Provides guidance in planning, implementing, and utilizing project evaluations for accountability and program improvement. Although the Kellogg handbook is written for its grantees, the information is widely applicable. *Available online: http://www.wkkf.org/pubs/Pub770.pdf*

Continued from page 37, Impact Study

researchers at the Federal level continue to integrate their ideas to shape this research effort in ways that not only answer legislatively mandated questions, but also benefit program quality. Moreover, the essential input of program staff and advocates has been sought on multiple levels of the planning and implementation process to ensure that the programmatic "voice" is heard. For this project, as it has done for countless others, the entire Head Start community is coalescing to seize the opportunities and meet the challenges of an initiative that has important implications for the future of Head Start.

The Head Start Impact Study is being implemented by the ACF Child Outcomes Research and Evaluation (CORE) team and the Head Start Bureau through a contract awarded to Westat in collaboration with the Urban Institute, American Institutes for Research, and Decision Information Resources. ■

Michael Lopez *is Lead Senior Social Science Research Analyst, Child Outcomes Research and Evaluation (CORE), Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS. E: milopez@acf.hhs.gov.*

Continued from page 27, Effects of Research Process

areas for continuous improvement.

CUI also adopted another research tool first introduced by NEQRC. The Head Start program decided to use the Self-Regulation Scale (SRS), a 10-item measure, to rate children's social competence and task mastery (Bronson 1999). It was developed in response to a desire for a brief, easily completed scale that measures some of the same constructs assessed by NEQRC with the much longer Bronson Social and Task Skill Profile: Teacher Version (Bronson 1996).

At present, the shorter Scale (SRS) is completed for each child as part of the initial screening and again, at the end of the year. It is used by CUI for two main reasons: 1) to identify potential themes for classroom curricula, and 2) to identify specific children needing further intervention. The developer of the scale, Dr. Martha Bronson, has been and is actively involved in discussions with CUI staff regarding the best use of the tool.

These two instruments, adopted from the original versions used in the research design, provide CUI with useful information. The results are used internally to identify needs and areas of strength and to suggest topics for in-service trainings. The results are also used externally. For funding agencies, CUI has proof of self-evaluation with widely accepted tools. Furthermore, funders increasingly rely on the ECERS-R to examine program quality. By using this Scale on a yearly basis, CUI ensures program quality in a manner directly comparable to other agencies.

Lessons Learned

CUI'S PARTNERSHIP WITH EDC has led to changes within the agency. A copy of all data collected by CUI staff is kept *on-site* in order to answer agency-specific questions in a timely manner. Additionally, CUI has access to a research consultant, as well as appropriate statistical packages, to assist in data analysis. CUI now requests feedback from studies in which it participates and uses this information to improve the agency's services. For example, CUI recently participated in a large-scale pilot study conducted by the Massachusetts Department of Education (DOE). School systems, child care agencies, aftercare programs, family child care providers, and parents answered questions regarding the availability of and need for child care services. CUI requested and received a copy of their data from the DOE and has used them to obtain needs-related information for grant applications.

In sum, what are the lessons CUI staff learned from their research collaboration with the NEQRC?

- They learned the necessity of clearly identifying each organization's research goals and methods.
- They learned the importance of identifying benefits of participating in the research process, both general and specific.
- They learned the necessity of identifying demands that will be made on staff and how best to assist staff with these demands (including, but not limited to, the use of tools added after the research had begun).
- They gained a greater sense of the time required for data collection and analysis and what expectations are realistic.
- They learned the difference between research purposes: that is, national research that feeds into policy analysis and national program evaluation versus in-house research that guides internal program improvement and informs practice.

The collaboration between these two partners, while at times difficult, was generally successful. In fact, the CUI managers think the research process was a "great learning experience and now we feel quite savvy about research." The Policy Council is eager for reports on how the program is doing and for evidence of positive change. They have come to appreciate how research investigation and data collection can lead to program improvement.

Recently, CUI identified an important research agenda around language and literacy. Although the ECERS-R scores were showing overall improvement in the classroom environments, the teaching of language and literacy needed to be strengthened in the program. CUI agreed to participate in another national Head Start research investigation with EDC that addressed these educational concerns. A classroom observation tool (ELLCO) developed by EDC was used to collect baseline data. EDC and CUI co-wrote a teacher training program. After one year of in-service training, changes are evident in the classrooms. According to a CUI administrator, "The

Continued on page 57

Continued from page 56, Effects of Research Process

teachers are doing more intentional teaching around language and literacy." Post-training results from the ELLCO and teacher and parent surveys show positive gains. EDC will no longer be formally involved in CUI's literacy initiative, but CUI is prepared to continue on its own to provide training and evaluate change in its educational program.

EDC is now taking the lessons it learned in the research collaboration with CUI and applying them to its work with another Head Start agency, Action for Boston Community Development (ABCD). EDC's work with CUI in the area of language and literacy will be expanded in ABCD to include more classrooms and more instruments and will be conducted over a longer time period. There is no doubt that both CUI, the Head Start agency, and EDC, the research organization, benefited in ways that ultimately improved their organizational effectiveness and translated into improved services for Head Start children and their families. ■

REFERENCES

Bronson, M. B. 1996. *The Bronson Social and Task Skill Profile: Teacher version*. Chestnut Hill, MA: Boston College.

Bronson, M. B. 1999. *Self-Regulation Scale.* Chestnut Hill, MA: Boston College.

Harms, T., R. M. Clifford, & D. Cryer. 1998 . *Early Childhood Environment Rating Scale. Revised*. New York: Teacher's College Press.

Howard, C., C. J. Lewkowicz, & D.K. Dickinson. In press. Both sides now: An examination of the relationship between researchers and Head-Start practitioners. *NHSA Dialog: A Research to Practice Journal for the Early Intervention Field*.

Wagner, J. 1997. The unavoidable intervention of educational research: A framework for reconsidering researcher-practitioner cooperation. *Educational Researcher* 26 (7): 13-22.

Corinne Lewkowicz *is a Research Consultant for Communities United, Inc. T: 781-736-7890; E: lewkowicz@aol.com.* Stacy Dimino *is Executive Director of Communities United. T: 781-736-7890; E: sdimino@communitiesunitedinc.org.*

Continued from page 22, Significance of Play

nature and course. 2nd ed. New York: McGraw-Hill Book Company.

U. S. Department of Health and Human Services. 1996. *Trends in the well-being of America's children and youth: 1996.* Washington, DC: Office of the Assistant Secretary for Planning and Evaluation.

U. S. Department of Health and Human Services. 1997. Program performance standards for the operation of Head Start programs by grantee and delegate agencies, 45 CFR Part 1304, Federal Register, 61, 57186-57227. Washington, DC: U.S. Government Printing Office.

Vygotsky, L. S. 1978. *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wentzel, K. R. 1999. Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology* 91 (1): 76-97.

Wentzel, K. R., & S. R. Asher. 1995. Academic lives of neglected, rejected, popular, and controversial children. *Child Development* 66: 754-763.

Christy McWayne *is a doctoral candidate in the Psychology in Education Division in the Graduate School of Education at the University of Pennsylvania. T: 215-898-9842; E: cmcwayne@dolphin.upenn.edu.* John Fantuzzo *is Diana Riklis Professor in the Graduate School of Education at the University of Pennsylvania. T: 215-898-4790; E: johnf@gse.upenn.edu.* Virginia Hampton *is a Postdoctoral Associate in the Graduate School of Education at the University of Pennsylvania. T: 215-898-5005; E: ghampton@gse.upenn.edu.*

Why Research? ■ Building Local Labs ■ The FACES Study ■ Bilinugual Parent / Teacher Pull-out

U.S. Department of
Health and Human Services
ACF/ACYF/HSB
Washington, DC 20201

OFFICIAL BUSINESS
Penalty for private use $300